

Executive Summary*This summary has been co-created with ChatGPT.*

In the realm of modern business, integrating data analytics is a strategic imperative for maintaining a competitive edge. The modern CPA's value proposition is more than just number-crunching; it's about unlocking valuable insights for our clients.

For small and medium-sized SaaS firms grappling with revenue complexities, cashflow concerns, and operational challenges, our role should extend beyond conventional financial services. We can help our clients navigate these challenges by empowering them to use available analytics tools to discover what's underneath the hood of their KPIs.

In this report, you'll gain some perspective on the questions we're asking ourselves.

- (1) What is Data Analytics?
- (2) Why is Data Analytics important?
- (3) What are the areas of need for SMB SaaS firms?
- (4) Where can we develop competencies?

The connecting theme across the report is that our value as modern CPAs must go beyond GAAP Financials. The greatest problems our potential clients will face is being attractive to investors. We have to help them understand where they're currently at in their story, help them make the decisions to grow along their "Hero's Journey"¹ and, most importantly, help them communicate their business excellence to investors.

Some recommendations are provided in the developing competencies section of this report.

- (1) Go beyond dashboards by providing what-if reports and teaching our clients how to create their own what-ifs
- (2) Automate - Revenue Recognition, Contract Management, Tax Compliance
- (3) Highlight the value of cashflow planning
- (4) Help clients develop investment funding proposals

We should be working ourselves out of a job as each firm we support scales into larger markets and increases their operational efficiency. For the nerds out there, we should be Yoda training Luke to defeat the dark side.²

Our next steps will be outlining specific software to become competent with, reviewing funding proposals to reverse engineer the keys to success in VC funding, and mocking out templates for what-if reports.

¹ The Hero's Journey is a narrative archetype involving a hero's departure from the familiar world, initiation into the unfamiliar, and triumphant return home after transformative experiences and challenges. ([Link](#))

² [Link](#) for more info. (Isaac Woodall)



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What is Data Analytics?

“Data analytics converts raw data into actionable insights.” – Amazon Web Services³

While humans have existed for 300,000 years, business as we know it has only existed for about 5,000 years.⁴ Only ~1.6% of human history! It’s impossible to zoom out and truly grasp the full impact that buying, bartering and making stuff has had on the human experience. It seems almost whimsical that we went from trading Mesopotamian wheat to bluetooth — which you can’t convince me is not magic.⁵

While we may never understand bluetooth, we can break down the evolving business environment to support our clients in comprehending and combating the challenges facing their business. We can help them seize their opportunity to make the world a better place. One of the hot topics floating around the zeitgeist⁶ right now is the role that **Big Data** plays in making strategic business decisions that drive growth and value.

Think about how many times we click, swipe or type in a given day. How about every year? These actions all contribute to the massive amounts of **data** created. Now think about how much faster computers are than our evolutionarily awesome disposable thumbs. Just how much data have we created with our computerized counterparts?⁷

For any aspiring business, managing your data and finding a way to use it to drive value is a necessary key to success. So how do we do that? We use **data analytics** — the “tools, technologies and processes used to find trends and solve problems.”⁸

The Data Life Cycle⁹:

- (1) Generation – *everything* generates data
- (2) Collection – APIs, Open Source Databases, Internal System Reports and Datasheets
- (3) Processing – Turning raw data into something usable, efficient, and privacy compliant
- (4) Storage – Data Lakes, Data Warehouses.
- (5) Management - Ongoing process of maintaining **governance, lineage and compliance**
- (6) Analysis – Descriptive, Diagnostic, Predictive, Prescriptive¹⁰
- (7) Visualization – Creating graphical representation of your findings
- (8) Interpretation – Using our expertise to derive the potential implications of our analysis

³ [Link](#) to website. AWS is an Amazon subsidiary that is a leading cloud computing service provider.

⁴ Roberts, K. (2011). The Beginning. In *The Origins of Business, Money, and Markets* (pp. 9–27). Columbia University Press. <http://www.jstor.org/stable/10.7312/robe15326.8>

⁵ [Watch](#) this.

⁶ If I had to learn [the definition](#) for the GRE, then we all get to know it.

⁷ Hint: It’s [A LOT](#).

⁸ [Link](#) to website.(AWS)

⁹ [Link](#) to website. (Harvard Business School)

¹⁰ See [A-2](#) (Appendix)



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Why is Data Analytics important?

“The primary objective of data analytics is to address specific questions or challenges that are relevant to an organization to drive better business outcomes.” - CompTIA¹¹

We’re about to see one of the greatest innovation leaps since Ben Franklin leading us into a world of harnessed electricity.¹² Artificial Intelligence (AI) are going to stretch our human capabilities and empower entirely new ways to solve global problems. But AI are *really* dumb unless they’ve been trained on a lot of data. If companies at any level want to stay competitive, they must have tapped into their business’ Big Data to utilize the AI-development tools that will come to market in the coming 5-10 years.¹³

Preparing for the future by getting your data management systems in place is a great long-term perspective on better utilizing data analytics, but we know business owners are really going to focus and respond to the potential for short-term gains. Don’t worry – data analytics has that covered to.

Like all your least favorite umpires, our clients are blind.¹⁴ They can’t do anything with confidence without the data their business generates. The entire reason accounting is the language of business is because we translate the financial data into usable information that is the backbone of tax compliance, budgeting and decision making. This is what empowers a companies leaders to steer the ship.

Despite how much money talks, it’s not the only thing that matters when making business decisions. You’ll see later in this report that metrics like Churn, ARR/MRR, etc. are important to SaaS firms (or really anyone with a subscription-based model).

¹¹ [Link](#) to website. CompTIA is a well-known and trusted organization for all things information technology.

¹² [Link](#) to article. I hope I don’t have to explain who TIME Magazine is.

¹³ [Link](#) to article. Sequoia Capital is one of the largest ventures firms in the world – focused on tech and were backers for companies like Apple, Instagram and Zoom.

¹⁴ [Link](#)



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Where are the areas of need for SMB SaaS firms?

“SaaS scaling comes with a challenging paradox: You need to increase cash flow to pay for growth initiatives, but you need to grow in order to bring in more cash.” - Capchase¹⁵

In the past 25 years we have witnessed the rise of the subscription based model and the entire SaaS framework. Now it *dominates* the business environment. Companies are using an average of 130 SaaS applications within their operating environment.¹⁶ This rise doesn't happen without each firm paying their dues and navigating the challenges of the industry model.

Foremost, revenue recognition and contract management can be a NIGHTMARE. Our team already knows this with recent discussions we've had regarding Maxio. From my research, I'd say this probably the area of greatest need. Not only can a good revenue recognition solution lessen the cost of accounting, it can also help prevent revenue leakage by automating invoicing and payment processing.

A firm's tax compliance strategy will also be crucial for success. These companies will be selling to customers all across the country if not all over the world. That means they're going to have filings for potentially each jurisdiction they operate in AND have to figure out how much they owe based on that jurisdiction's code – a total nightmare!¹⁷ Some of our team seems to already have familiarity with Avalara, so they'd be a great solution to demo from for any additional insight on their offering for SaaS.¹⁸

Let's get back to the basics: *cash is king*. This can quickly become a huge problem for SaaS companies trying to grow. (Read the quote again.) They investing heavily upfront just to even bring a sellable product to market. They have to turn around and reinvest into infrastructure with nearly every major spurt in demand. Somehow they've also got to pay to keep the lights on and paychecks from bouncing. These constraints can lead to unexpected cash shortages if the firm isn't properly planning their cashflows.

These pain points can make or break the business. Our clients will have death by a thousand papercuts when their continued investment isn't seeing the expected returns from poor financial planning. Even if they get their act together from a financial planning and analysis perspective, they'll still face challenges with fundability because there's more to garnering investment funding than getting the revenues, taxes, and cashflows under their wings.

¹⁵ [Link](#) to article.

¹⁶ [Link](#) to article.

¹⁷ [Link](#) to article.

¹⁸ [Link](#) to website.



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Where can we develop competencies?

“These metrics provide valuable insights into your company’s financial health, operational efficiency, and growth potential, making your venture more appealing to potential investors.”
- Sage¹⁹

If we, as CPAs, want to scale our strategic value to SMB SaaS clients then we need to dial into to both their operational success metrics and their fundability metrics. Their operational success metrics are probably the ones you’re more familiar with.

- (1) Customer Acquisition Cost (CAC)
- (2) Customer Lifetime Value (CLV)
- (3) Monthly Recurring Revenue (MRR)
- (4) Annual Recurring Revenue (ARR)
- (5) Churn
- (6) CLV : CAC Ratio

Hitting their target within these metrics can help our clients develop a healthy, growable business. The next step will be accessing investment capital to drive scale. Investors will have some new checkboxes for clients.

- (1) CAC Payback - measures the time it takes for your SaaS company to recover the cost of acquiring a customer through their subscription payments
- (2) Net Revenue Retention – indicates low churn and high long-term profitability potential
- (3) Logo Retention – measures how many customers renewed within a given period out of those due for renewal

Our value proposition to clients is in an ability to help them determine which metrics to prioritize at a given moment and how to use data analytics to find the valuable pieces of knowledge and insight that will help them move the needle.²⁰ This will require understanding if their business is setup to efficiently and accurately report these metrics, and how to get there if not.

My current recommendation for opportunities to drive value:

- (1) Go beyond dashboards by providing what-if reports and teaching the operators how to create their own what-ifs.
- (2) Automate - Revenue Recognition, Contract Management, Tax Compliance
- (3) Highlight the value of cashflow planning
- (4) Help clients develop investment funding proposals

¹⁹ [Link to article.](#)

²⁰ See [A-6](#) for some insight as to where our metrics may lie within the financial data model. (Appendix)



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APPENDIX

(A-1) Definitions:

Big Data – high-volume, high-velocity and/or high-variety information assets that demand cost-effective, innovative forms of information processing that enable enhanced insight, decision making, and process automation ([Gartner](#))

Compliance – operating within the relevant regulations for data privacy (ex. HIPAA, FCRA, GDPR, CCPA) [[Thomson Reuters](#)]

Data analytics — the “tools, technologies and processes used to find trends and solve problems” ([AWS](#))

Governance – a principled approach to managing data during its life cycle, from acquisition to use to disposal ([Google Cloud](#))

Lineage - process of tracking the flow of data over time, providing a clear understanding of where the data originated, how it has changed, and its ultimate destination ([IBM](#))

SMB – Small or Medium sized Business

SaaS – Software-as-a-Service

(A-2) Types of Analysis:

Descriptive – What happened?

Example – Reach Reports

Diagnostic – Why did it happen?

Example – The client dropped professional service engagements because they’re too low on cash.

Predictive – What will happen?

Example – We anticipate to lose X and Y client within 6 months because clients with an AP to Revenue ratio greater than Z begin to drastically cut costs.

Prescriptive – We should do this.

Example – We’re likely to lose some clients soon, and we have 4 businesses in that industry who have contacted us within the past 6 months. We should prioritize those potential new client in our referral pipeline.

(A-3) The Four V’s

The Four V’s are the characteristics of data. They help us understand where our shortcomings may be so we can best address the challenges we’ll face in the Data Life Cycle.

Volume – how much data are you trying to use?

Veracity – how trustworthy is your data?

Velocity – how fast is data being generated and flowing through the Data Life Cycle?

Variety – is your data structured, unstructured or semi-structured?



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(A-4) The Data Value Stream

Data – Raw facts, figures or information

Information – Data that has been processed, organized and given context

Knowledge – An understanding gained from interpreting information and applying it to a specific situation.

Insight – A profound or intuitive understanding that develops from recognizing patterns or connection in data and information.

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(A-5) Data Model

