NUCLEUS RESEARCH

ROI GUIDEBOOK
AMPLITUDE

ANALYST

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EXECUTIVE SUMMARY

Amplitude is a product intelligence platform that helps teams around the world use their customer data to understand user behavior, customer retention, revenue, and more.

To better understand the benefits and costs associated with an investment in Amplitude, Nucleus conducted an in-depth return on investment (ROI) assessment of several customers using the Amplitude platform.

KEY FINDINGS

The following direct and indirect benefits represent those most commonly experienced by the companies analyzed in this report and made up the largest share of the returns.

655%
Average ROI

4.8 Months
Average payback period

46%
Increase to purchase conversion percentage

42%
Increase to revenue per order

DIRECT BENEFITS

Direct benefits include cost savings, cost avoidance, risk management, and changes that have a direct impact on a budget or profit and loss (P&L) statement:

- **Reduced software costs.** Nucleus found that companies that deploy Amplitude could address a broader range of analytics on a single platform. Companies could now rely less on internal legacy solutions that required an ecosystem of tools and applications managed through cross-department coordination.

- **Reinvested time.** Amplitude increased the efficiency of reporting processes across all use cases giving time back to analyst teams to reinvest in more value-driven processes. Through Amplitude's reporting capabilities, users could more effectively uncover the highest value opportunities and prioritize their roadmap to drive conversion, retention, and revenue.

- **Increased revenue.** Nucleus found that companies using Amplitude can better understand their customers to increase revenue per order by delivering targeted campaigns driven by product intelligence and a better understanding of customer behaviors.

INDIRECT BENEFITS

Indirect benefits include time savings from accelerated processes that can be quantified but have an indirect impact on a budget or P&L:

- **Increased productivity.** All companies benefited from increasing the productivity of managers, data analysts, and data scientists by deploying Amplitude. On average, employee productivity increased by 80 percent as Amplitude could evaluate customer behavior and derive deep analytics more efficiently than legacy solutions.

THE SOLUTION

As digital becomes the norm, Companies and customers are turning to digital channels at an unprecedented rate. Companies face rising pressures to embrace data and understand how user behaviors contribute to acquiring and retaining users for sustained product growth. That's where Amplitude comes in.

Amplitude is the leading product analytics platform that tracks customer behavior analytics to help businesses develop a deeper understanding of customers, campaigns, and products. The trusted solution by several large enterprises and used by over 40,000 digital products, Amplitude has built-in tools designed to improve data accessibility and encourage collaboration to help teams learn together and iterate faster. While it used to take weeks (or longer) to get insights on a product or campaign, Amplitude makes it possible for product, marketing, engineering, and design teams to ask the right questions and get the answers they need in only a matter of minutes.

A closer look at how Amplitude helps teams:

- Empower teams with the complete data they need to understand and improve the end-to-end product experience.
- Measure and improve outcomes by tying product strategy and decisions to impact.
- Understand how users convert and what experiences create friction with step-by-step breakdowns of all paths taken by users.
- Use machine learning and behavioral targeting technology to predict future behavior and personalize at scale.
- Improve decision-making by using AI-enabled analytics to highlight connections between customer base trends.

Amplitude breaks down data to help teams compare different user groups, identify their most valuable customers, and discover underperforming cohorts. Amplitude also supports a wide range of integration needs out-of-the-box with support for solutions such as Google Analytics, Facebook Ads, and Adobe.

As products become more complex, and customer expectations continue to evolve. Now more than ever, teams need product intelligence to build faster and drive meaningful outcomes. The insights provided by Amplitude allow teams to remove friction and use real-time customer data to connect fragmented events with metrics and analytics and fully understand the user experience.

Learn more about Amplitude [here.](#)

For security standards, Amplitude is accredited with SOC2 Type-2 and ISO 27001 certifications, SSO support, and a recognized AWS Partner for Digital Customer Experience.

ANALYSIS OF BENEFITS

Nucleus found that companies deploying Amplitude experienced a range of benefits across a number of different areas which were largely dependent on the size and complexity of their organization; the size and number of their users, the number of functionalities used, the volume of data collected, and the size of teams utilizing the solution.

The best business cases focus on two or three key benefits that can guide deployment and adoption efforts. To guide organizations in building their business cases, Nucleus has presented the primary benefits most commonly realized by Amplitude customers with guidance ranges based on what customers typically experience.

For this project, Nucleus sought to understand why customers choose Amplitude over other competing product analytics tools. After speaking with several customers, Nucleus identified benefits surrounding increased user productivity, improved decision-making processes, increased purchase conversion percentages, increased repeat purchase conversion percentages, increased revenue per order, increased retention rates, eliminated legacy solution, and reinvested time towards value-driven processes.

INCREASED EMPLOYEE PRODUCTIVITY

Across the board for all use cases, Amplitude helped increase user productivity regardless of the industry or product type, as the capabilities of the solution allowed users to focus on more value-driven tasks. Additionally, the platform's usability simplified analytical processes for developers and data analysts and enabled non-technical users to extract insights where they would otherwise need to rely on data scientists.

Nucleus found that Amplitude reporting capabilities reduced monitoring times from automated analytical processes. Simplified processes for writing queries can increase employee productivity by an average of 80 percent for analytics teams. For example, a research team member at an online media company originally joined as an analyst, and since working with the Amplitude solution, that employee transferred to being a data engineer. For a multimedia company, Amplitude saved time for product managers by reducing the dependence on data scientists.

Increase employee productivity by 80 percent on average

Before Amplitude, product managers would need to go back and forth on queries and methodology before finding the correct solution. On the data science side, Amplitude saved five hours per week per employee by automating analytical processes. Within the same company, the process of writing queries was accelerated by five times. Before switching over to Amplitude, the company was forced to write custom queries leading to inefficiencies in reports, analytics, and product development.

For a restaurant, Amplitude provided both direct and indirect benefits for their employees and their app users. Directly, it made employees' work easier because it could determine the impact of their product changes on their user experience. Indirectly, their customers using the app saw the experience improve as the company understood customer behavior better. With Amplitude's reporting and data capture capabilities, users can definitively tell whether a campaign or project improved the overall experience. Amplitude can validate changes already made within a product, ensuring that time is not wasted diving deeper into unnecessary projects. It can also help teams quickly test hypotheses in real-time, so they only invest in high-value opportunities. Additionally, Amplitude can automatically highlight anomalies that went undiscovered by analytics teams, saving additional time within a project lifecycle.

INCREASED PURCHASE CONVERSION PERCENTAGES

Many companies will turn towards conversion rate metrics when determining the success of a campaign, website, or product. Conversion rate optimization is the defining factor in generating increased revenue throughout all channels leading to increased retention in the long-term. On average, companies realized an average of a 46 percent increase in purchase conversion percentage after switching from a legacy solution to the Amplitude platform. Furthermore, a restaurant saw the purchase conversion percentage rise to 67 percent, and the repeat purchase conversion percentage rose to 86 percent as more and more users returned to the application. The increase in campaign outreach combined with a better understanding of customer behavior led to 90 percent of users visiting the mobile app three times within the first month they downloaded it. Amplitude helped improve the product over time, which improved the overall customer experience leading customers to spend more money when revisiting the application.

> **Increase purchase conversion percentages by an average of 46 percent**

INCREASE CUSTOMER RETENTION

With Amplitude guiding product and analytics teams, companies can see how their product experiences and marketing programs impact customer retention. For every company, it is all about finding the 'North Star' with Amplitude analytics, which helps companies determine a value proposition and a key metric as an indicator of value that leads to long-term business impact. These areas help product and analytics teams develop stronger product strategies as well as provide a good leading indicator for revenue generation. If product and analytics teams can uncover what product engagement drives long-term retention, they can double down on making accounts more successful and drive customer retention.

As Amplitude gathered data on customer behavior, sales teams in B2B organizations could use the data to microsegment, allowing for more personalized sales approaches. With a better understanding of the customer and the product, sales teams have an easier time generating revenue, and conversely, customers would receive better service. The synergy created with Amplitude analytics between product teams, analytics teams, and sales teams helps drive customer retention. Customer retention is a significant factor in sustained growth for many B2B organizations, as it is much easier to sell to an existing customer. Furthermore, strong retention rates typically translate to increased customer value, which opens new opportunities for cross-sells and upsells. Many Amplitude customers highlighted an increase in customer retention, but as each company and industry calculate retention differently, a

concrete average for retention across different industries would be a misleading metric. Hence, we have not included average retention in the report.

INCREASED REVENUE PER ORDER

By creating a single source of truth for customer behavior analytics, companies could more accurately measure campaign success and refine the deployment of customer interaction points such as mobile applications. Nucleus found that companies using Amplitude can better understand their customers to increase revenue per order by delivering targeted campaigns. On average, organizations experienced an increase in revenue per order by 42 percent.

Increase revenue per order by an average of 42 percent

INCREASE EFFICIENCY BY REDIRECTING ANALYTICS TEAMS

Amplitude's industry-leading reporting and analytics capabilities increased analyst teams' efficiency across the board for all industries and use cases covered in this report. The analytics features helped companies not only unlock insights fast but also increased the quality. Many analytics teams reported faster data cleanup through Amplitude's governance features. Teams utilizing proactive monitoring capabilities saw a dramatic time reduction between identification and resolution of data issues. Additionally, most analytics tasks were always completed ahead of schedule, as teams no longer needed to rely on days or weeks of data analyses between multiple teams.

On average, analytics teams realized a 66 percent efficiency gain

Without Amplitude, creating business data reports was time and resource-intensive for all of the companies evaluated. Significant amounts of time were dedicated to tasks surrounding finding the right data, formatting the insights, and presenting analytics reports. Furthermore, by the time the report was complete and ready for presentation, the data was typically out of date. Amplitude helped analytics teams avoid focusing on unnecessary manual tasks such as choosing metrics to include, examining raw data, creating an analytics report, and deciphering customer behaviors. With the time Amplitude freed up, analytics teams can focus on larger scale problems that would be competitive differentiators for the business: improving algorithm outputs or automating different processes. Being able to focus on higher leverage work helped not only the business but also improved employee retention. On average, analysts got back 66 percent of their time typically spent on serving business

stakeholders and could redirect this time to value-driven aspects of analytics projects. The efficiency gain helped analytics teams focus on more complex analytical challenges that would drive meaningful change for the business.

INCREASED MONTHLY NEW USER GROWTH FOR PRODUCTS

By developing a better understanding of a customer-base, companies can fine-tune products, product launches, and marketing campaigns to maximize the ROI. Amplitude can derive insights on how a particular product experience or campaign impacted the customer. The platform also gives companies the data to achieve growth by forecasting future outcomes and creating strategic business plans. With tools to better address customer predictions, companies saw an increase in monthly new users in the range of 53 percent to 350 percent over a multi-year period.

Increase monthly new users for products in the range 53 to 350 percent

Before deploying Amplitude, a media provider of online magazines struggled to gain subscriptions to the site as most customers continued to view the content for free. Through analyzed trends, Amplitude helped the company predict the success of a paywall for customers outside of the United States. With the confidence provided by the analytics team using Amplitude, upper-level managers decided to move forward with the project and deploy it to their target market in the US. With Amplitude, the company could ensure their paywall for premium content meant fewer viewers, but more money gained from subscriptions. Before the paywall, new subscribers to the magazine averaged around 1000 users per month. Using insights from Amplitude, the company increased subscribers by 350 percent to 4500 users per month.

COST SAVINGS FROM REDUCED SECURITY RISKS

Most customers use Amplitude to measure the success of campaigns and to understand customer behavior better, but there is more to Amplitude. The functionality goes beyond product analytics as the platform can automatically highlight anomalies within datasets. For example, the success of one company relied on user-driven content and subscriptions. Over the past seven years, this company used Amplitude to identify trends among fraudulent users who try to either scam content creators or subscribing customers. As trends among fraudulent users were identified, the company would proactively ban these users before significant damage was done to the product or the customers. Over the years, Amplitude continued to help the analyst teams strengthen the understanding of these trends and ended up saving the company from annual $1 million losses.

IMPROVED DECISION-MAKING

Amplitude's product intelligence extends further than simplifying processes for employees and creating efficiencies. The in-depth analytics and insights on customer behavior trends help drive metrics that let companies make better, more informed decisions. These decisions lead to meaningful growth in their key business KPIs, like engagement, conversion, retention, and growth. Throughout all the use cases covered, each customer highlighted the value that Amplitude provides to a company. Marketing teams no longer blindly approach sending campaigns with best guesses but instead make confident decisions on the next steps to take using Amplitude's factual data. Amplitude empowers product teams to de-risks decisions leading to less costly consequences and failures as people are no longer letting their gut guide their choices. Analyst teams are making decisions faster than ever, so roadmaps and projects can be more dynamic and proactive. At an educational startup, securing investments from potential stakeholders was essential to the growth of the company. Going into investor meetings, management could bring analytics, insights, and reports generated by Amplitude to display company campaigns' success and confidently answer all investor questions as they did not need to spend significant time searching for the data.

ANALYSIS OF COSTS

Nucleus analyzed the initial and ongoing costs of software, hardware, personnel, consulting, and training over a three-year period to quantify the return on investments that Amplitude delivered to customers.

COST CATEGORY	COST RANGE	COST FACTORS
Annual Software Subscription	$60,000–$300,000	Event volume, tracked users
Professional Services Led Implementation	$2,500-$39,150	Internal team skill levels, size of teams, complexity of deployment
Ongoing Personnel	$1,485–$20,250	Internal team skill levels, size of teams
Training	$0	No training programs purchased

FINANCIAL SUMMARY

Nucleus found that the average return on investment (ROI) from an Amplitude deployment was 655 percent, with a high of 1,386 percent and a low of 130 percent. ROI was calculated over a three-year time period, projecting costs and benefits forward on a straight-line basis for organizations that had not yet reached three years of deployment.

KEY FINANCIAL METRICS:

- The payback period for an Amplitude deployment ranged from 1.2 months to 12 months, with an average of 4.8 months.
- The annual total cost of ownership (TCO) of a deployment ranged from $84,000 to $302,985, with an average annual TCO of $165,411.
- The net present value (NPV) of an Amplitude deployment ranged from $92,756 to $3,967,698 with an average of $1,598,572.

FINANCIAL METRICS	HIGH	LOW
ROI	1,386%	130%
Payback (months)	12	1.2
Annual benefit	$3,035,000	$153,000
Benefit to cost ratio	10.1:1	1.8:1
Annual TCO	$302,985	$84,000
Present Value	$3,967,698	$92,756
Internal Rate of Return	1337%	100%

CUSTOMER PROFILES

For this development of this ROI Guidebook, Nucleus spoke with several Amplitude customers to discuss their experiences with Amplitude and conducted in-depth ROI assessments.

FINANCIAL TECHNOLOGY

The company is an enterprise-level financial technology company centered around electronic commerce, facilitating online money transfers worldwide. The main product serves as both a financial payment solution for personal consumers and businesses. Aside from money transfers, the product also serves as an alternative payment solution for online shopping giving businesses more flexibility for payment portals.

The product is solidified as one of the worldwide leaders in the online money transfer and e-commerce space. Upper-level management knew it needed a robust analytics solution to dive deep into customer behaviors and derive insights. Legacy solutions proved to be inadequate as the company continued to grow within the market. The legacy solutions struggled to derive actionable customer insights from real-time data leaving the analytics team less informed. The company decided to move forward with Amplitude as it proved to be the only analytics tool that could fully support product intelligence through customer data.

On an ongoing basis, the company has user experience data analysts fielding requests and building dashboards, but little to no monitoring or maintenance is required for the solution. Amplitude filled a gap within the analytics teams that the legacy solutions could not address. While analytics teams could make decisions based on historical data, the legacy systems limited teams when it came down to analyzing real-time metrics. Amplitude could provide a consistent and direct connection between the product and the users. Analytics teams could spend less time reworking reports or dashboards to match current trends as Amplitude's real-time analytics capabilities allowed users to stay up to date with customer behavior data. The analytics teams' job became significantly more straightforward as they could see what changes to the product were improving the experience. The streamlined analytics processes allowed analytics teams to reinvest time and resources to other areas/projects within the company to promote growth and drive revenue. Furthermore, Amplitude provided upper-level management with improved decision-making capabilities, a benefit realized by all Amplitude customers.

MULTIMEDIA

The company is a medium-sized online media company centered around providing an online magazine to users covering current affairs, politics, sports, and culture in the United States. The online website is updated throughout the day to provide current events to a diverse range of users worldwide. Aside from online magazine coverage, the company also engages in online podcasts and advice columns for readers.

As the company grew significantly over the years, it looked towards replacing Google Analytics as the primary tool for understanding customer behavior. Amplitude quickly caught the attention of key stakeholders of the new project and highlighted Amplitude as a leading industry standard for event tracking on websites. The company decided to move forward with Amplitude after viewing demos on the solution's functionality and how it would apply specifically to the companies' needs.

Once implemented, the company began using Amplitude to track user activity on the website and collect metrics on how long users remained on the site, how long users spend on specific sections, and track how users receive new projects such as a podcast revamp. For new projects, the company utilized the analytics tools to see exactly where users were clicking on specific pages to determine what caught readers' attention and what went unviewed. The Amplitude solution proved to be easy to use and made analytics capabilities available to a wide range of users such as the data analyses team as well as business level users. On an ongoing basis, the Amplitude solution only requires two developers to monitor processes to ensure that data is flowing correctly. In the end, the company highlighted the extreme usability of the platform as it empowered the non-technical users to achieve similar levels of analyses as data scientists and developers. For example, a research team member originally joined the company as an analyst, and since working with the Amplitude solution, that employee transferred to being a data engineer. Furthermore, Amplitude helped the company track the membership purchases and collect metrics that can be used for conversion attribution, such as which campaign users were coming from and the reasons for signing up.

MARKETPLACE

The company is an enterprise-level multimedia company providing a membership platform and business tools for content creators. The company helps content creators earn income from subscribers on the site for content such as music, literature, podcasts, and videos/films. When the company was created, upper-level management knew it would need a deep analytics solution to help understand the impact of marketing campaigns on the website.

The company deployed Amplitude in 2013 when it was still a relatively new solution on the market, and the company has never looked back. Amplitude is used across the operational

structure to cover diverse areas and understand user behaviors on both the website and the mobile app. A significant use case for Amplitude is understanding how the company moves across the product life cycle and measures user behaviors. During the implementation, seven users devoted an average of 15 percent of their time to implement the solution during a six-month project. On an ongoing basis, three employees spend around 5 percent of their time monitoring the Amplitude solution to ensure that data is appropriately captured. Overall, the company highlighted Amplitude's minimal maintenance requirements and automated data capture processes.

Over the five years since updating the solution to match the company's new business structure, significant benefits were realized in terms of average spend per user, conversion rates, efficiency gains, and more. The average spend per user on the website and mobile application increased by 20 percent with Amplitude along with doubling the conversion rate. Amplitude also helped data analysts redirect attention to value-driven processes and tackle more complex and strategic query structures that not only helped the business but also improved employee retention. The process of writing queries was accelerated by five times once switching over to Amplitude as the company was forced to write queries by hand before the implementation. Amplitude saved time for managers by reducing the dependence on data scientists. Before Amplitude, managers would need to go back and forth on queries and methodology before finding the correct solution. On the data science side, Amplitude saved five hours per week per employee by automating analytical processes. Furthermore, Amplitude helped the company identify trends of fraudulent users saving the company from million-dollar losses over the years.

BUSINESS-TO-BUSINESS

The company is an enterprise phone solution providing business Voice-over-IP (VoIP) and unified communications (UC) services to other companies. The company strays away from traditional hardware and instead deploys software-based solutions through a simplified UI that caters to mobility. The pure-cloud approach to a business communication platform ensures that companies can remain flexible with communication solutions allowing users to receive calls, messages, and video meetings from anywhere.

The product and marketing teams sought an analytics solution to provide easily accessible metrics for user behavior tracking. The product teams needed a platform to help strategize product releases, support product features, evaluate product success, and make decisions based on user data from companies deploying their solution. Prior to deploying an analytics solution, the company relied on internal analyst teams to pick segments to evaluate and manually analyze metrics. Additionally, product managers would need to make new reports for each product evaluation meeting, and by the time the report was completed, the data was out of date.

With Amplitude, the company immediately addressed concerns with accessing behavior tracking data to help product managers make more informed decisions and better answer questions from marketing teams. Marketing teams could go to product managers with specific questions about the product itself in terms of user sentiment and campaign success. Additionally, product managers could rely on the data in front of them instead of creating reports on past data. Amplitude's real-time data not only improved the decision-making abilities but also allowed product managers to reuse charts and dashboards for long-term benefit and customer behavior analysis. Furthermore, the real-time data helped both the product and marketing teams better address their clients' needs. The data helped cater the VoIP solution to disparate companies to ensure that deployments met the standard within each industry. All product managers, data analysts, and marketing teams got time back in their day that previously would have required more laborious processes using outdated back-end user data. By utilizing Amplitude to make product decisions on a weekly basis, user efficiency increased by an average of 78 percent across product management, data analyst, and marketing teams.

EDUCATION TECHNOLOGY COMPANY

The company is a small education technology company focused on providing educational tools to children through applications on smartphone and tablet devices. The company aims to give children a boost of learning throughout the day to supplement the rules, timetables, and solutions that may already be in place. The application reduces the amount of negative screen time for children and instead pushes towards fun educational activities. It also provides parents with real-time data about their child's personality trends and pedagogical progress while offering parents tools to create their own content.

The company and the application are new, and since day one, the company knew it would need an analytics tool to evaluate user behavior. Stakeholders told management to wait until they had traction on the product to move forward with an analytics tool. Still, they were confident that they would see success in their intended markets and would require significant analytics capabilities. After quickly moving forward with Amplitude, the implementation project began with a single employee devoted to deploying the solution. Even with one person working on the implementation, it only took eight weeks, and that employee dedicated only three weeks of their time during that period.

Amplitude currently serves two primary purposes for the company as it helps the company secure future investments from potential investors, and it helps increase overall operational efficiency. As a startup, investors are essential early on to support the growth of the company. By using Amplitude to display critical metrics surrounding, among others, development, user sentiment, and product usage, the company can confidently approach potential investors. Answering business questions from investors became a simple process

as the company had all the data on hand, and Amplitude helped increase the quality of work within the company, which further reflected on investors. In the end, Amplitude helped the company secure more investment funding and increase efficiency surrounding data analytics processes saving the company thousands of dollars per year in labor costs by accelerating projects.

THE ROI GUIDEBOOK METHODOLOGY

Based on the ROI assessments developed through Nucleus's in-depth interviews with Amplitude customers, Nucleus has developed an ROI framework for organizations who are considering an Amplitude investment. The framework can be used by potential and existing customers to understand the cost, benefit, and deployment factors that impact their potential return on investment. The Nucleus ROI Guidebook development process includes:

Technology review. Nucleus interviewed Amplitude product managers and subject matter experts, participated in product demonstrations, and conducted a full review of technical documents and data sheets to gather data on Amplitude.

Customer interviews. Nucleus analysts conducted in-depth interviews with five organizations that were using Amplitude to understand their business challenges, their decision and deployment processes, the costs incurred, and benefits achieved, and best practices learned from their deployments.

ROI assessments. Based on the data collected from customers, Nucleus completed an ROI assessment of each customer's deployment and validated that ROI audit with each customer's project team leadership.

Construction of aggregate ROI framework and analysis. Nucleus constructed a financial model based on its NASBA-registered ROI methodology, using the data from Nucleus's ROI business case assessments of the customers detailed. All financial metrics presented in this report are calculated based on standard NASBA accounting principles commonly used by certified finance professionals.

Benefits guidance. Based on the variability and clustering of benefits in the aggregate, Nucleus provides appropriate averages, ranges, and estimation factors to guide other customers in using the framework to develop their own ROI projections.

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Nucleus Research provides the ROI, insight, benchmarks, and facts that allow clients to understand the value of technology and make informed decisions. All research is built on an in-depth, case-study research approach that analyzes the results of actual deployments to provide technology advice built on real-world outcomes, not analyst opinions. Learn more at

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