



REAL-TIME ANALYTICS

for Marketing

12 TOP EXPERTS SHARE THEIR SECRETS



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FOREWORD

Today, most businesses are software businesses. In industry after industry, a company's software is now the primary way it interacts with customers. To succeed, marketers must know their customers, but how do they do that when the interactions come through a screen instead of face-to-face meetings?

The answer is software analytics—transforming metrics and events from software into actionable data in near-real or real time. The coming together of technology and business metrics with business intelligence and software analytics tools allows marketers to better understand not only how their software performs but also how their business performs—while there's still time to do something about it. Real-time analytics—a key component of software analytics—helps companies be more agile, responsive, and customer focused than ever before. Best of all, it lets creative problem solving happen immediately.

This e-book was created to demonstrate the value of real-time analytics to a wide variety of companies and marketers. We hope the first-hand marketing experiences chronicled here offer you game-changing insights, best practices, and inspiration for how to leverage the power of software analytics to make better, faster, data-driven marketing decisions.



Lew Cirne,
Founder and CEO,
New Relic
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New Relic is a software analytics company that makes sense of billions of data points about millions of applications in real time. New Relic's comprehensive Software as a Service-based solution provides one powerful interface for Web and native mobile applications and consolidates performance monitoring data for any technology in your environment. More than 200,000 users employ our cloud solution to analyze more than 200 billion data points across more than 3 million applications. When your brand and customer experience depend on the performance of modern software, New Relic provides insight into your overall environment. Learn more at newrelic.com.

INTRODUCTION

One contributor to this e-book wisely points out that everything happens in real time, but not everything benefits from real-time analysis. That realization underscores the challenge facing marketing analytics and decision making today. The ability to capture massive amounts of real-time data often exceeds our understanding of how to use that information effectively.

To better understand how to get the most marketing value out of real-time analytics—and with the generous support of New Relic—we collected answers to the following question from 12 top real-time analytics professionals:

A colleague has been tasked with implementing real-time analytics to transform her company (e.g., saving money, improving a product, or smarter marketing). Please share a story from your own experience or a critical piece of advice that will help her succeed.

Using first hand experiences from the experts, this e-book looks at when real-time analytics can better inform marketing decisions and actions. It also shows how to get the most marketing value out of real-time analytics. One recurring theme from the experts is that to derive value from real-time analytics, it helps to be able to take real-time action.

We hope the insights and experiences these real-time analytics experts share help you strengthen your own marketing practices and strategies.



All the best,
David Rogelberg
Editor



Mighty Guides make you stronger.

These authoritative and diverse guides provide a full view of a topic. They help you explore, compare, and contrast a variety of viewpoints so that you can determine what will work best for you. Reading a Mighty Guide is kind of like having your own team of experts. Each heartfelt and sincere piece of advice in this guide sits right next to the contributor's name, biography, and links so that you can learn more about their work. This background information gives you the proper context for each expert's independent perspective.

Credible advice from top experts helps you make strong decisions. Strong decisions make you mighty.



Data helps us track our
athletes' achievements.

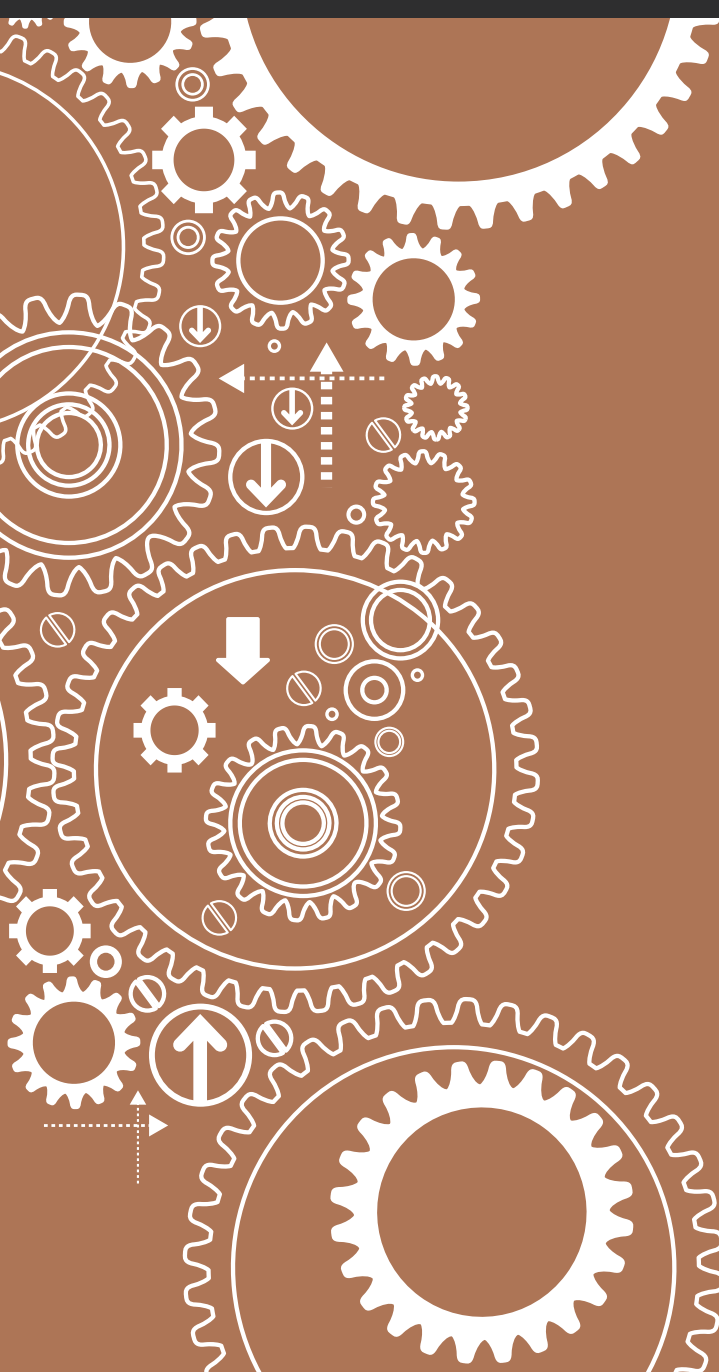
Mark Shaw
CTO & Co-Founder



We are *all* data nerds.



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ACTING IN REAL TIME



ANIL BATRA
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Real-time analytics is helpful only if you are ready for real-time actions—which you should be. To capture customers' mind and wallet, you must be able to act in real time.

Real-time Web analytics provides a view into what's happening on your site at that moment. It allows you to see the issue as well as take corrective actions—in real time. It allows you to drive more action from your site visitors.

Here are a few cases where you might want to use real-time Web analytics:

- You launched a new campaign— paid search, an email newsletter, a television ad—and would like to see how people are reacting to it.
- You placed new promotions on your site and want to see how visitors are reacting to them so that you can tweak the promotions in real time.
- You added new stories, links, and so on and want to see if anyone is clicking them so that you can make changes based on instant feedback.
- You designed a new site and would like to make sure that everything is working as expected. Real-time analytics is a great quality assurance tool.

“ Real-time analytics is helpful only if you are ready for real-time actions. ”

KEY LESSONS

- 1 REAL-TIME ANALYTICS HAS TO RESULT IN REAL-TIME ACTION TO BE USEFUL.
- 2 REAL-TIME ACTION RESULTS IN MORE ACTION FROM WEBSITE VISITORS.



ACTING IN REAL TIME



ANIL BATRA

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- You launched a new feature on your site, added a video, or deployed a new game and would like to know if your visitors are using it so that you can push out alternative versions, if necessary.
- You analyze the data in real time and personalize users' experience in real time, to show the next logical piece of content or push a product that they might be interested in.

Here's an example. About seven years ago, I was working with a large business-to-business technology company. The agency I worked for launched a beautiful new site with some great functionality. The client spent millions of dollars driving visitors to this wonderful new experience.

One of those new features was a landing page with an interactive map. This map allowed visitors to choose their country and go down a path that was created for that country in their local language. Unfortunately, in some browsers, that "cool" functionality did not work, resulting in high page abandonment. We didn't know about this bug until the next day, when we analyzed the data. It would have been really nice to have real-time analytics back then.



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“

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RAISING THE BAR WITH REAL-TIME ANALYTICS



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Ted Rubin is a leading Social Marketing Strategist, Keynote Speaker, Brand Evangelist, and Acting CMO of Brand Innovators. Ted is the most followed CMO on Twitter, according to *Social Media Marketing Magazine*, one of the most interesting CMOs on Twitter according to Say Media, number 13 on *Forbes* Top 50 Social Media Power Influencers (2013), and number 2 on the Leadtail August 2013 list of Top 25 People Most Mentioned by digital marketers. Follow him @TedRubin, @R_onR, or @Parentng.



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The past few years have transformed the way organizations use data. Today, the volume, variety, and velocity of data are taking the business world by storm. Organizations that are able to understand and act on the data—based on analytics but with the relationship at the forefront—will emerge as winners.

Social media, cloud, and mobile have added a layer of urgency to the big data wave. As the velocity of information increases, there's a need to process the data and analyze it for relevant use cases, but gathering and analyzing real-time data from various structured and unstructured sources are not easy, especially while keeping it human at the same time.

Smarter organizations understand this and invest in people, process, and technology that enable them to use real-time analytics for strategic and operational benefits while keeping relationship enhancement at the forefront. Real-time analytics is not just for smarter marketing but also for cutting inefficiency from operations, improving customer service, and watching trends that can affect the bottom line.

“Real-time analytics is not just for smarter marketing.”

KEY LESSONS

- 1 INVEST IN PEOPLE, PROCESS, AND TECHNOLOGY TO USE REAL-TIME ANALYTICS FOR STRATEGIC AND OPERATIONAL BENEFITS WHILE KEEPING RELATIONSHIP ENHANCEMENT AT THE FOREFRONT.
- 2 USE REAL-TIME ANALYTICS, AND ORGANIZE TEAMS AND PROCESSES FOR REAL-TIME RESPONSE.
- 3 MONITOR YOUR COMPETITORS, AND OBSERVE THEIR WEAKNESSES AND STRENGTHS IN REAL TIME.



RAISING THE BAR WITH REAL-TIME ANALYTICS



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Here is an example of how a company used real-time analytics to implement those changes in its operations and customer service.

A technology service provider wanted to transform its reputation from a slow, sleepy company to one that is nimble, customer responsive, and attentive. It started by setting up teams that worked in two shifts, ensuring continuous and timely review and response. Next, it looked for a product that could provide social listening, real-time analytics (share of voice, sentiments, time to resolution), workflow, and reporting. After it had selected a product and trained its team, the company defined the processes and business rules for handling and coordinating customer queries, issues, and rants—and how to properly engage.

By using real-time analytics and organizing teams and processes for real-time response, the company's social customer service team had a big impact on customers and improved brand reputation. Real-time response management and the ability to analyze interactions provided the company with unprecedented insights into its customers' issues, attitudes, and behavior.

Real-time analytics was also tremendously valuable for identifying emerging issues (service down in a geography, delays in meeting service levels) and for preparing responses to any incidents. In addition, the company monitored its competitors and observed their weaknesses and strengths in real time. It was able to generate leads from customers who were unhappy with the competition or who had just moved into the target geography.

Within a few months, this company went from just another Internet and cable services provider to one that was considered agile, sensitive to customer needs, and responded to its customers within minutes of their post. It not only made its customers happy but lifted its brand value—all through the smart use of real-time analytics.

“

A social customer service team can have a big impact on customers and improve brand reputation.

”



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THE POWER OF TRANSFORMATION WITH REAL-TIME ANALYTICS



GARY ANGEL

Principal, EY

As President of Semphonic, Gary Angel led his company's growth from a two-person organization to one of the leading digital analytics practices in the United States. When Ernst & Young acquired Semphonic in 2013, Gary became the leader of EY's Digital Analytics practice. Voted the most Influential Industry Contributor by the Digital Analytics Association, Gary writes an influential [blog](#), has published numerous white papers on advanced digital analytics, and is a frequent speaker at industry events.



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The single worst example of real-time analytics I was ever a part of occurred when I was in a team of analysts monitoring Web traffic from a Super Bowl buy. We sat by our monitors, producing minute-by-minute reports of traffic and sending them off to an executive team (most of whom were too busy watching the game to notice). By halftime, we knew our buy had generated disappointing results. It was useful knowledge... for next year.

People can fail at analytics transformation in countless ways, but three reasons collectively account for a substantial percentage of that failure:

- Confusing real-time events with real-time analytics
- Performing analytics without an operational strategy
- Picking the wrong problems

Everything happens in real time—Super Bowl ads are shown, prospects show up at the website, cash registers ring. But just because you collect data in real time doesn't mean that your analysis must or should be in real time. Real time matters when you need to (and can) make decisions immediately following observations.

The only real-time decision from our Super Bowl effort was that the chief marketing officer got a jump on updating his resume.

“No matter how good your analysis is, it isn't worth anything if you don't have the operational wherewithal to take advantage of it.”

KEY LESSONS

- 1 DON'T CONFUSE REAL-TIME EVENTS WITH REAL-TIME ANALYTICS.
- 2 BEFORE PERFORMING ANALYTICS, YOU MUST HAVE AN OPERATIONAL STRATEGY IN PLACE.
- 3 TRANSFORMATION DOESN'T COME FROM LITTLE PROBLEMS.



THE POWER OF TRANSFORMATION WITH REAL-TIME ANALYTICS



GARY ANGEL

Principal, EY

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Which brings me to operationalizing analytics. No matter how good your analysis is, it isn't worth anything if you don't have the operational wherewithal to take advantage of it. That's critical in real time, because it can be so difficult to "productionize" real-time decisions. Without the ability to serve personalized content on your website, all the analytics in the world won't matter. By focusing on operations when you first choose your analysis project, you increase your chances of success by an order of magnitude.

Finally, transformation doesn't come from little problems. Identifying funnel errors in real time is probably a good application for real-time analytics. It's practical and valuable, but it's not transformative. Tuning digital campaigns in real time is likely a similar case, although there are times when dramatically reducing the cycle time on marketing analytics can be transformative. If you can expunge 50 percent of the cost of underperforming campaigns and shift it into better marketing drives, you may well deliver something close to transformational improvement.

For most businesses, real-time analytics is transformational only when they use it to tailor the customer experience. Inventory and lifetime value pricing, real-time offer matching, gamification, and massive path optimization are the places where real-time analytics can drive fundamental transformation.

Understanding the difference between real-time data and real-time decision making, choosing analytics projects because you have a clear path to production, and focusing on the things that will deliver true competitive advantage are key to effective real-time analysis.



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ANALYTICS IS MONEY



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Real-time analytics is the ultimate manifestation of the old adage, “time is money.”

Broadly speaking, real-time analytics can be tremendously useful for its cost-saving ability as well as to increase revenue. These benefits come from two drivers:

- Spotting a relevant event faster than you otherwise would
- Responding to an event faster than you otherwise would

By spotting and responding to an event faster, you can make money. High-frequency trading on Wall Street is a good example: by identifying patterns in stock movements milliseconds before the competition, hedge funds have made a killing. Moving from Wall Street to Main Street, fashion retailers that spot the next must-have trend can not only be the first to market with hot products but can also preemptively lock up sources of supply before the competition gets wind of it.

By spotting and responding to an event faster, you can save money, as well. If the **Checkout** button on your e-commerce site isn't working, every second can cost you thousands of dollars. Before you know it, frustrated customers are venting on social media. Real-time monitoring of key sections of the site, coupled with analytics that can determine whether what is happening is normal or anomalous, can flag these problems and avert disaster.

“ By spotting and responding to an event faster, you can make money. ”

KEY LESSONS

- 1 BY SPOTTING AND RESPONDING TO AN EVENT FASTER, YOU CAN MAKE AND SAVE MONEY.
- 2 FOCUS ON A PROBLEM, OR FOCUS ON DATA.



ANALYTICS IS MONEY



ANU CHITRAPU

Senior Vice President,
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Anu Chitrapu works in the Vendor Analytics group at Bank of America. With 20 years of experience in business intelligence, analytics, marketing, and general management, Anu has a passion for using analytics to make smart business decisions. She holds an MBA from the MIT Sloan School of Management and is President of Vision Aid, a nonprofit organization that serves the visually challenged in India. She is also on the advisory board of Saheli, an organization that seeks to empower victims of domestic violence.



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As you examine your business environment for opportunities to apply real-time analytics, start with two places: focus on a problem, or focus on data.

Take a pressing business problem and brainstorm it: “Can I solve this problem better if I had more timely data?” Similarly, take data that has recently become available (perhaps because of the completion of an IT project) and brainstorm it: “To which problem areas is this data pertinent? What can I do with this data to make a dent in this area?” If you get stuck with one approach, switch to the other.

The most impactful applications of real-time analytics have three ingredients: data, a problem, and imagination. Only you can provide that last ingredient!



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As you examine your business environment for opportunities to apply real-time analytics, start with two places: focus on a problem, or focus on data.



THE KEY TO REAL-TIME VALUE IS MEANINGFUL REAL-TIME ACTION



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June Dershewitz has had a 15-year career driving analytics strategies for major corporations. Currently, she is the Director of Digital Analytics at Apollo Education Group, the parent company of University of Phoenix. Before that, she was a member of the leadership team at Semphonic, a prominent analytics consultancy now part of Ernst & Young. As a long-standing advocate of the analytics community, June was a co-founder of Web Analytics Wednesdays. She's also a Director Emeritus of the DAA.



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Imagine real-time data visualization splashed across the largest display in your corporate office. The images shift and move, revealing beautiful details as you stare at it with rapt attention, your mind blank.

Now snap out of it! That's precisely the wrong way to tap the potential of real time.

If you want to transform your company with real-time analytics, put the visualizations aside. Instead, start by imagining the value of real-time action.

In the era of big data, it's easy to accept the promise of data-driven decisions: start with data, develop insights, and then take action. But how long does that data-to-action cycle take? It depends on how the action plays out.

Often, a valid data-to-action cycle can take many days, especially when multiple people are involved. If your CEO needs to approve a strategic data-driven action, it simply won't happen in real time—nor does it need to.

So, if the key to finding value in real-time analytics is not in visualization and not in most decisions where people are involved, then where is it?

“Start business transformation by imagining the value of real-time action.”

KEY LESSONS

- 1 CLOSED-LOOP AUTOMATED SYSTEMS HOLD THE GREATEST PROMISE FOR REAL-TIME ACTION.
- 2 IF YOUR CUSTOMERS CAN'T TRANSACT WITH YOUR BUSINESS, EVERY SECOND COUNTS.
- 3 REAL-TIME ANALYTICS IS ONLY WORTH DOING WHEN THERE IS A MATERIAL BENEFIT TO HAVING A TIGHT FEEDBACK LOOP.



THE KEY TO REAL-TIME VALUE IS MEANINGFUL REAL-TIME ACTION



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Sometimes, a swift data-driven action is both achievable and worthwhile. That's exactly the sweet spot for real-time analytics.

What makes a real-time action achievable? Closed-loop automated systems hold the greatest promise for real-time action. Take several examples from digital marketing. Personalization, retargeting, and bid optimization—they all use details known in the moment to act in real time and deliver value. Automation infrastructure may come with a high overhead, but it's the most effective way to shorten the data-to-action cycle.

Humans, although no match for automated systems, can play a role in real-time analytics, too, but they must be compelled to “jump” when they see the data. Mission-critical processes like operational monitoring deserve real-time action. If your customers can't transact with your business, every second counts.

What makes a real-time action worthwhile? Just because it's possible to act in real time doesn't mean you should. You have a choice: you could invest in a system to make real-time decisions possible, or you could accept a lag.

Before you launch any real-time initiative, consider this: If you are able to act on an insight within two seconds instead of two days, how much do you stand to gain? Real-time analytics is only worth doing when there is a material benefit to having a tight feedback loop.

Here's my challenge to you: find the points in your business where real-time action is achievable and worthwhile. Then—and only then—will real-time analytics hold the potential to transform your business.



Humans, although no match for automated systems, can play a role in real-time analytics, but they must be compelled to “jump” when they see the data.



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Data helps us
revolutionize fashion.

Camille Fournier
Chief Technology Officer

RENT THE RUNWAY

We are *all* data nerds.



KNOW THE RULES: USING REAL-TIME ANALYTICS EFFECTIVELY



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A digital marketing analytics expert, Allison Hartsoe writes the blog *Schrödinger's Cat* to help marketers handle the impact of what they didn't see until it was measured. Previously a Senior Manager at Ernst & Young, VP Analytics at Semphonic, and founder and CEO of Aspyro, an eBay analytics company, Allison co-founded iSyndicate in San Francisco, a venture-backed marketplace that sold digital content to Fortune 500 corporations from media publishers. She has appeared on CNN Europe and NPR's Real Computing and spoken at eMetrics, eBay Live, and Internet World.



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Real-time analytics can be surprisingly effective. Unfortunately, however, the rules for capturing data through devices are increasingly complex. Unsuspected errors create poor visitor experiences and can lurk for weeks. Here are two examples where real-time analytics shines.

Online consumer retail is a high-speed environment. The need to push new web content live is so overwhelming that unintentional mistakes occur. One international retailer I know stumbled on a quiet, costly error caused by a simple device redirect. An IT bug caused Mac desktops to receive the mobile site. Tablets were downgraded to the same less-functional mobile site. Suddenly, an estimated \$16 million was slowly bleeding from the retail cart. Real-time analytics could have caught this significant change in tablet and Mac desktop cart activity by segmenting the traffic by granular device (e.g., *Mac desktop*, not just desktop) and scanning for an unexpected, statistically significant drop, not a plain volume change.

“Real-time analytics can be surprisingly effective. Unfortunately, however, the rules for capturing data through devices are increasingly complex.”

KEY LESSONS

- 1 THE NEED TO PUSH NEW WEB CONTENT LIVE IS SO OVERWHELMING THAT UNINTENTIONAL MISTAKES OCCUR.
- 2 LOOK FOR A MEANINGFUL CHANGE WHEN MONITORING ONGOING TRENDS OR A SET A BENCHMARK FOR EVENTS.



KNOW THE RULES: USING REAL-TIME ANALYTICS EFFECTIVELY



ALLISON HARTSOE

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A digital marketing analytics expert, Allison Hartsoe writes the blog *Schrödinger's Cat* to help marketers handle the impact of what they didn't see until it was measured. Previously a Senior Manager at Ernst & Young, VP Analytics at Semphonic, and founder and CEO of Aspyro, an eBay analytics company, Allison co-founded iSyndicate in San Francisco, a venture-backed marketplace that sold digital content to Fortune 500 corporations from media publishers. She has appeared on CNN Europe and NPR's Real Computing and spoken at eMetrics, eBay Live, and Internet World.



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Large technology brands often have substantial marketing budgets, but these budgets may not be expected to generate immediate results. For example, “purchase intent” is measured by combining online traffic with offline product sales. These sales could occur a month later. One large technology company launched a campaign in China but occasionally sent visitors to pages that were not available or were in English. These Chinese visitors had a poor experience and immediately left. Real-time analytics could have detected high rejection rates immediately, recovering campaign funds that were being squandered by segmenting content by landing page and monitoring the rejection rate (aka *bounce rate*) against a benchmark.

As we move toward the Internet of Things, data and devices will only continue to multiply. Today, using real-time analytics to identify cost-saving measures is surprisingly easy. Look for a meaningful change when monitoring ongoing trends or set a benchmark for events.



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Today, using real-time analytics to identify cost-saving measures is surprisingly easy.



CREATING LIVE FEEDBACK THROUGH REAL-TIME ANALYTICS



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Dorothy Creaven is Co-Founder and CEO of Element Wave, a software company specializing in Mobile Marketing technology and Mobile CRM. Featured in such publications as *The Sunday Times* and *VentureBeat*, she is regularly asked to speak at conferences in the area of mobile engagement and retention technology for the mobile app market. Element Wave's award-winning product is a mobile user engagement and customer retention tool that dramatically increases app usage for brands, through mobile analytics and push messaging, a proven way to significantly increase mobile app revenues.



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Real-time analytics is key when it comes to successful mobile marketing campaigns. Without it, mobile app publishers and brands are wasting valuable opportunities to connect with their target audience.

As a general rule, our handheld devices are rarely more than a meter away from us at any time. For brands, this opens a powerful and effective marketing channel through the highly persuasive combination of targeted push notifications and mobile app analytics. The live aspect is important here, because real-time feedback is critical to influencing mobile app users at exactly the right time. Through this live feedback mechanism, it's now possible to influence a buying decision in real time, which can greatly impact the success of a mobile marketing campaign, leading to significantly higher mobile revenues for brands.

Airlines use the power of real-time analytics extensively. For example, the relevance of a particular message depends strongly on the customer's context at the time. If a customer is at home four hours before his or her flight, a traffic alert relevant to the customer's location could be beneficial and goes a long way toward building brand loyalty.

“Real-time feedback is critical to influencing mobile app users exactly at the right time.”

KEY LESSONS

- 1 THE CONSTANT PROXIMITY OF MOBILE DEVICES OPENS A POWERFUL MARKETING CHANNEL.
- 2 USER ENGAGEMENT IS CRUCIAL TO SUCCESSFUL MOBILE APPS.
- 3 CREATE AN IMMERSIVE EXPERIENCE FOR YOUR MOBILE CUSTOMERS.



CREATING LIVE FEEDBACK THROUGH REAL-TIME ANALYTICS



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Dorothy Creaven is Co-Founder and CEO of Element Wave, a software company specializing in Mobile Marketing technology and Mobile CRM. Featured in such publications as *The Sunday Times* and *VentureBeat*, she is regularly asked to speak at conferences in the area of mobile engagement and retention technology for the mobile app market. Element Wave's award-winning product is a mobile user engagement and customer retention tool that dramatically increases app usage for brands, through mobile analytics and push messaging, a proven way to significantly increase mobile app revenues.



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Alternatively, if the customer is already at the airport but has not yet checked in, a last-minute special offer to upgrade to first class could be a great way for the airline to upsell. Either of these marketing messages in the wrong context, however, would be highly ineffective. Analytics such as real-time location combined with an awareness of the customer's context offers brands incredibly powerful ways to engage with their customers.

Crucial to the success of any mobile app is user engagement. One of the best ways to keep your mobile audience engaged is to get to know the customer app life cycle, and then develop a strategy around mobile customer relationship management. By using real-time analytics to understand the customer's context in different situations, you can create mobile moments to streamline the customer experience.

Furthermore, by analyzing drop-off points for your mobile app customers, you can preempt where they may disconnect and introduce incentives to encourage them to stay connected with the app.

For example, mobile gaming companies use real-time analytics to monitor a customer's path through a game and engage with the customer at opportune times. When the player has reached a certain level or accumulated a threshold of points, brands can engage with that customer in real time to continue his or her excitement and sense of achievement. This creates an immersive experience for the customer and ultimately leads to more usage and higher revenue for the brand.



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By analyzing drop-off points for your mobile app customers, you can preempt where they may disconnect and introduce incentives to encourage them to stay connected with the app.



WHAT IF? ANSWERING THE QUESTION WITH REAL-TIME ANALYTICS



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Ken Herron drives revenue by developing stronger emotional connections between companies and their customers. He has held executive-level marketing and sales leadership positions in multiple Web and mobile tech companies. A graduate of Stanford Graduate School of Business' Marketing Management program, Ken earned his MIM from the Thunderbird School of Global Management. Ranked the #2 CMO on Twitter worldwide by *Social Media Marketing Magazine*, he is an author and frequent speaker on leveraging technology for marketing. Follow Ken @KenHerron.



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The two most powerful tools for business-to-business and business-to-consumer marketers? Two little words: “What if?”

Asking the question, “What if?” gives you and your team the freedom to pursue as many out-of-the-box ideas you can conceive, but until recently, there has been a problem. No, it's not you and your team. You have no shortage of ideas to increase customers, sales, and profits. What you have not had, however, is the ability to know the impact your ideas are having on results—in real time. Rather than take the risk of driving blind, you have been forced to limit yourself to “safe” roads, eliminating your riskiest—and most likely your most transformational—ideas. Real-time analytics gives you the superpower of knowing the results of your marketing ideas fast enough to take advantage of market windows. Here are just two real-life examples of how I used real-time analytics to increase revenues from hotel bookings.

“Real-time analytics lets you know the results of marketing ideas fast enough to take advantage of market windows.”

KEY LESSONS

- 1 REAL-TIME ANALYTICS LETS YOU KNOW THE IMPACT YOUR IDEAS ARE HAVING ON RESULTS IMMEDIATELY.
- 2 ANALYTICS FREES YOU TO FOCUS ON ACCELERATING CUSTOMER AND REVENUE GROWTH.



WHAT IF? ANSWERING THE QUESTION WITH REAL-TIME ANALYTICS



KEN HERRON

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Valentine's Day was coming up. My team and I asked ourselves, what if we could increase revenues by convincing some of the couples booking romantic getaway weekends to book a hotel suite in Paris instead of Las Vegas? (Yes, we made a lot more money booking hotel suites in Paris.) Using real-time analytics, we were able to rapidly test multiple marketing messages and images until we found just the right combination that convinced Vegas-bound couples to swap the lights of the Vegas Strip for the lights of the Eiffel Tower. *We liked* being marketing superheroes.

People sometimes forget that hotel rooms are just like bananas—perishable. If you don't sell all of them, you end up leaving a lot of money on the table. When we would have hotels with unsold inventory, we used real-time analytics to identify the smallest possible incentives that would convince travelers to book in those hotels.

Real-time analytics empowers you to answer—without limits—the marketing question, “What if?” It frees you to focus on accelerating customer and revenue growth for your brands.



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Real-time analytics frees you to focus on accelerating customer and revenue growth for your brands.



REAL-TIME ANALYTICS AND THE PSYCHOLOGY OF DEMOGRAPHICS



**JEFFREY
HAYZLETT**

Primetime TV Show Host,
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Jeffrey Hayzlett is a global business celebrity and speaker, bestselling author, Contributing Editor and Host of *C-Suite with Jeffrey Hayzlett* on Bloomberg Television and *Mind Your Own Business* on C-Suite TV. He is the CEO of The Hayzlett Group, an international strategic business consulting company focused on leading change and developing high-growth companies. Connect with Hayzlett on Twitter, Facebook, or LinkedIn.



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Data and analytics are critical to any business but especially to those that are about to launch new businesses areas or products. Prior to any launch, it's important that you do your homework. You can't launch a product or business without researching, narrowing down, and developing your target audience.

Everyone wants to focus on selling to the core business leaders: it's where the biggest sales lie. But they do that trying to go through *The Today Show* or *Good Morning America*. Those are good shows, but do you really believe that C-Suite executives are watching either of them?

I recently launched C-Suite TV, a web-based digital on-demand business channel that features interviews and shows for c-suite leaders and business executives. To get to C-Suite TV's target audience, my team and I did our homework. There are more than 8 million businesses in North America. Of those 8 million, 7.5 million are small businesses. They are not the target audience of C-Suite TV because they don't necessarily have C-Suites. They may have heads of finance or sales, but not CEOs, CMOs or CFOs. That leaves 600,000 or so businesses in North America that have C-Suites and revenues of \$10 million or more. That's the target audience of C-Suite TV.

“ You can't launch a product without researching and developing your target audience. ”

KEY LESSONS

- 1 DO YOUR RESEARCH TO DEFINE YOUR TARGET AUDIENCE.
- 2 USE REAL-TIME ANALYTICS TO UNCOVER THE PSYCHOLOGY OF YOUR DEMOGRAPHIC.



REAL-TIME ANALYTICS AND THE PSYCHOLOGY OF DEMOGRAPHICS



JEFFREY HAYZLETT

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Jeffrey Hayzlett is a global business celebrity and speaker, bestselling author, Contributing Editor and Host of *C-Suite with Jeffrey Hayzlett* on Bloomberg Television and *Mind Your Own Business* on C-Suite TV. He is the CEO of The Hayzlett Group, an international strategic business consulting company focused on leading change and developing high-growth companies. Connect with Hayzlett on Twitter, Facebook, or LinkedIn.



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As we built the site and looked for distribution partners, we knew that to justify ad spending we needed to provide hard numbers. We partnered with Piksel to host our programming. Through them, we knew how many people watched, how often they watched, when they watched, and from which countries. All of this data helped us tailor better content for our audience to increase our engagement and viewership. We have also used tools like Vidyard that offer real-time analytics to provide even more insight into the psychology of our target audience.

We launched in July 2014, and it has been awesome to watch the data pile in. Not only do we have Google Analytics running 24x7, but all of our links are built using Google's URL Builder, which allows us to add custom campaign parameters and see from where people are visiting our site. No matter where the link is placed—whether in a press release or shared on social media—we can see the most popular places where people are coming from. This knowledge allows us to share more information on those networks and sites and even reach out for potential advertising leads.

Real-time analytics, from building to promoting new episodes, has been critical to C-Suite TV's success. The information gives us the opportunity to better tailor our content and develop new programming that the C-Suite wants.



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Real-time analytics gives us the opportunity to better tailor our content and develop new programming.



LEVELING THE PLAYING FIELD WITH REAL-TIME ANALYTICS



ADAM GOTTERER

Head of Engineering,
Nomi

Adam Gotterer is Head of Engineering at Nomi, an omnichannel marketing platform that helps retailers better engage with their customers. He has held roles as the co-founder of Shopalytic, VP of Engineering at Lot18, and the Director of Engineering at CollegeHumor/Bustedtees.



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Brick-and-mortar retailers and service providers often find themselves on the losing side of the data analytics battle when competing with online retailers. Online, there is access to an arsenal of tools such as cookies, click tracking, A/B testing, targeted advertising, and funnel tracking. In the physical world, decisions are often based on instinct, not data.

For years, the brick-and-mortar world has tried to use infrared tripwires, camera counting, and loyalty cards to understand customer behavior, but the battlefield is changing. Through the advent of new technologies like advanced cameras, Wi-Fi sensors, and iBeacons, the brick-and-mortar world can now effectively measure loyalty and conversation rates, perform A/B tests, calculate dwell time, count passersby, and measure bounce rates.

“Brick-and-mortar retailers and service providers often find themselves on the losing side of the data analytics battle when competing with online retailers.”

KEY LESSONS

- 1 BRICK-AND-MORTAR STORES CAN COMPETE WITH ONLINE RETAILERS BY USING NEW TECHNOLOGY TO MEASURE LOYALTY AND CONVERSION RATES.
- 2 RETAILERS THAT UNDERSTAND THEIR CUSTOMERS AND LEVERAGE TECHNOLOGY TO IMPROVE THE CUSTOMER EXPERIENCE ARE MORE LIKELY TO SURVIVE.



LEVELING THE PLAYING FIELD WITH REAL-TIME ANALYTICS



ADAM GOTTERER

Head of Engineering,
Nomi

Adam Gotterer is Head of Engineering at Nomi, an omnichannel marketing platform that helps retailers better engage with their customers. He has held roles as the co-founder of Shopalytic, VP of Engineering at Lot18, and the Director of Engineering at CollegeHumor/Bustedtees.

One such company that has leveraged this technology is a retail chain that hosts a yearly music festival. The festival represents a significant investment for the chain, and it needed a way to quantify its return on investment. In the months preceding the music festival, the company deployed Nomi's tracking sensors to all of its stores. The sensors collected data about the number of visitors and their loyalty across the chain. Sensors were also placed throughout the music festival, and these data were later compared with the data collected from the stores. The chain was able to learn a tremendous amount about the impact the festival had on new and repeat visits to its stores.

Some say there's a crisis in retail. It's more challenging than ever for brick-and-mortar retailers to compete against their online counterparts: the retailers that understand their customers and leverage technology to provide a better experience might just be those that survive.



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“

Retailers that understand their customers and leverage technology to provide a better experience might just be those that survive.

”



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USING ANALYTICS IN REAL TIME



LISA ARTHUR

CMO, Marketing
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As Teradata's Chief Marketing Officer, Marketing Applications, Lisa Arthur drives customer-centric initiatives and serves as global industry thought leader around data-driven marketing and Teradata's Integrated Marketing Cloud solutions. A 30-year marketing veteran, Lisa is the author of *Big Data Marketing; Engage Your Customers More Effectively to Drive Value*. Her industry thought-leadership blogs have appeared on the Forbes.com CMO Network, and she is a contributor to *Lean back*, a marketing blog of The Economist Group.



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When it comes to improving your business through smarter, customer-focused, integrated marketing using real-time analytics, one important fact you must remember is this: Real-time analytics don't all have to be performed in real time—they just need to be *used* in real time. In this sense, *real-time* is a relative notion.

Let me offer an example.

I have a friend who leads the e-mail marketing organization at a major online retailer. He's a wizard at real-time analytics, and e-mail is a core strategic channel his firm uses to stay engaged with customers. In conducting e-mail and digital campaigns, however, it's not uncommon for him to use customer attributes and communication history—data that might have been captured from an earlier online session or from other channels—as real-time criteria for decision making. Here, the analytics themselves don't all have to be executed in real time every time. As long as they're available to be used in real time, all is well, because customer engagement becomes stronger with more relevant messaging.

“Real-time analytics don't have to be performed in real time—they just need to be *used* in real time.”



KEY LESSONS

- 1 KEEP AN OPEN MIND ABOUT THE KINDS OF METRICS THAT WOULD BE USEFUL FOR YOUR ENVIRONMENT.
- 2 DON'T LIMIT YOURSELF TO ONLY THOSE ANALYTICS THAT RUN IN AN INTERACTIVE ENVIRONMENT.
- 3 CHOOSE ANALYTICS THAT SPAN CUSTOMER ENGAGEMENT CHANNELS.

USING ANALYTICS IN REAL TIME



LISA ARTHUR

CMO, Marketing Applications,
Teradata

As Teradata's Chief Marketing Officer, Marketing Applications, Lisa Arthur drives customer-centric initiatives and serves as global industry thought leader around data-driven marketing and Teradata's Integrated Marketing Cloud solutions. A 30-year marketing veteran, Lisa is the author of *Big Data Marketing; Engage Your Customers More Effectively to Drive Value*. Her industry thought-leadership blogs have appeared on the Forbes.com CMO Network, and she is a contributor to *Lean back*, a marketing blog of The Economist Group.



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To put this another way, for real-time analytics to be valuable, you don't actually have to be performing the analytics at the precise moment of customer interaction. Analytics on your data—any time you use them—will help you engage better with customers at any point of interaction.

This is a subtle but important distinction.

What this implies for data-driven marketers on the quest to implement “real-time analytics” is this:

- Take a broad view of the types of overall customer and business analytics that would be useful to you in real time.
- Don't limit your thinking only to analytics that can be run in an interactive environment (mobile app, Web, chat, customer care).
- Always remember: Often, it's customer analytics that span all customer engagement channels (not just real-time interactive environments) that offer critical insight that you can then use to guide the interactions that take place in real time.

Real-time analytics for effective customer interaction management involves a lot of moving parts that have to work in concert, within nanoseconds, to determine the best offer, message, or experience for every customer interaction. Underneath it all, a lot of data are flowing throughout an integrated marketing and analytical ecosystem, and any change in data quality anywhere along the flow can affect your customer's experience.

Always put your customer's ideal experience first, and your data and analytics will serve you well—in real time, every time.

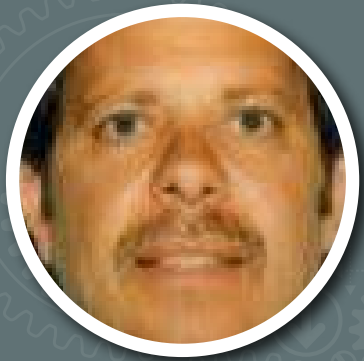


Always put your customer's ideal experience first, and your data and analytics will serve you well.



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USING WHAT'S AVAILABLE, WHEN IT'S AVAILABLE



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Richard Sink is the founder of Critical Connections. He has more than 30 years of tech experience and 10 years of experience in online business optimization. He is well versed in how new technologies, search engine optimization campaigns, Web development, and social media strategies can solve business problems, improve business processes, and achieve a competitive advantage that will positively affect his clients' bottom-line results. You can find Richard on LinkedIn, Facebook, Twitter, Pinterest, and Google+.



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Whether your goal is to save money, improve a product, or employ smarter marketing, today's savvy business owners need deep analysis of how their consumers are behaving online. Businesses must identify target audiences, build social channels, listen to social conversations, and know where potential clients are investing their online efforts.

Today's consumers live in an always-on, always-connected world, and their attention spans are fleeting. They can move from one topic to the next in a matter of seconds. From weather concerns to financial trends and political affairs, search queries give valuable insight into what matters most to people at a specific moment. And given the proliferation of mobile devices, consumers are searching in a way that provides valuable insights into discovery and research. If you can address your consumers' needs through quick response, you put your business at a significant advantage.

Resist the temptation to focus only on what happens on your website. Instead, prioritize what happens around your customer's journey. If you focus your attention on every action, purchase, and sign-up, you can start to understand how your business functions.

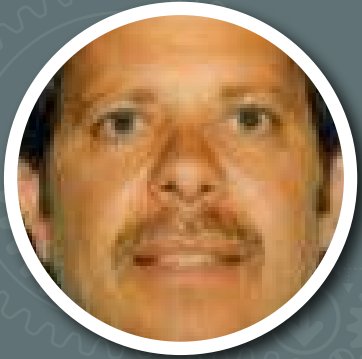
“ Resist the temptation to focus only on what happens on your website. ”

KEY LESSONS

- 1 PRIORITY WHAT HAPPENS AROUND YOUR CUSTOMER'S JOURNEY, NOT JUST ON WEBSITE VISITS.
- 2 KNOW WHY YOU'RE SUCCEEDING.
- 3 TRACK WHAT YOUR CUSTOMERS ARE DISCUSSING ON SOCIAL MEDIA.



USING WHAT'S AVAILABLE, WHEN IT'S AVAILABLE



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Richard Sink is the founder of Critical Connections. He has more than 30 years of tech experience and 10 years of experience in online business optimization. He is well versed in how new technologies, search engine optimization campaigns, Web development, and social media strategies can solve business problems, improve business processes, and achieve a competitive advantage that will positively affect his clients' bottom-line results. You can find Richard on LinkedIn, Facebook, Twitter, Pinterest, and Google+.



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Knowing you're succeeding is one thing; knowing why is even better. Most analytics tells us what's happening, but it's more important to know who's doing it, how they found us, what their profile is, and what they're purchasing.

Where can you find the signals for improving your business? One strategy is to follow what your customers and prospects are posting and discussing on social media. Make lists of relevant topics, ideas and trends. Follow popular industry blogs and pay attention to the posts that generate the most feedback and comments. All industry, company, and executive mentions should be captured and monitored to ensure a positive brand image. Sign up for Google Alerts to be notified of specific topics. Over time, relevant insights will begin to emerge, and you'll adapt your business operations accordingly. Armed with this data, you can begin to shape your customers' opinions and influence their purchasing behavior in ways never before imagined.

The next-generation Web (Web 3.0) is all about the data and analyzing it to produce more efficient and actionable results. Until that's a reality, you have to use what's available, when it's available.



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Over time, relevant insights will begin to emerge, and you'll adapt your business operations accordingly.





Data helps us make
messaging more fun.

Guy Fighel
Director of Engineering



We are *all* data nerds.

