Easy peasy: 5 ways to rewire your brain for happiness

For citrix.com—As a leading psychologist, Shawn Achor has spent two decades studying happiness and positivity. His bona fides include being an award-winning researcher and teacher at Harvard, best-selling author on the subject, and popular TED lecturer.

So when he speaks you should listen. For instance, Achor asserts our circumstances -- including age, race, gender, social status, and wealth -- only account for 10% of our happiness. The rest is determined by our genetic baseline for happiness (i.e. optimist vs pessimist) and our individual intentions, including the way we spend our time and the things we ponder.

Obviously, happiness means different things to different people. But there are plenty of standardized things we can do to boost our chances of finding it. Somethings such as knowing oneself, learning how to forgive, and balancing the personal, professional, and social demands on our time can be life-long pursuits.

But other happiness-building attributes are quite easy, Achor argues. In order from least difficult to most difficult, they are as follows:

1. Count your blessings. The fastest way to rewire your brain for happiness is to count three new things you're grateful for everyday. If you do this for 21 consecutive days, Achor says "the brain retains a pattern of scanning the world for the positive instead of the negative." Unlike watching the news which reminds of us of all that is wrong in the world, positive thinking reminds us to notice the good first and foremost.

2. Keep a journal. Family photos and home movies succeed in triggering good memories. But they fail to capture our thoughts at the time, something that can only be done with a journal. To help your brain relive the best of life, write about positive events within 24 hours of experiencing them, Achor counsels. If you've missed that ideal window, writing something is better than nothing and can still lead to happiness.

3. Be alone with your thoughts. This includes no-distraction thinking, prayer, phone-off meditation, and single-tasking. I'd also add counting deep and slow breaths from 0 to 10, Mr. Miyagi style. More than anything, being alone with our thoughts allows our brains to "get over the cultural ADHD that we've created by trying to do multiple tasks at once," Achor says.

4. Serve others. Life isn't as convenient for some as it is for others. Just ask royalty. But life is challenging for everyone, no matter who you are. And there's always someone who's worse off than you. You won't realize that, however, until you start looking for ways to serve those around you. Soup kitchens, giving money, visiting the sick, encouraging others, making someone laugh, and random acts of kindness never fail to boost our happiness. Even something as simple as writing an email to praise or thank someone can have a measurable impact, Achor says.

5. Exercise regularly. Getting in the habit of regular exercise requires a lot of momentum. In that sense, achieving regular exercise is difficult. But once you find an activity you enjoy -- if not hate the least -- and stick with it, regular exercise is not only possible, it's not that big of a deal. Not only does physical fitness improve health, energy, sleep, skin, and many other things, it teaches our brains that behavior matters, Achor says. Don't know where to start? Try the scientific 7-minute workout three times a week (app here).

About the author: Blake Snow is a bodacious writer-for-hire, adroit storyteller, and daring content strategist to Fortune 500 companies. Previously he worked as a featured contributor to top 20 U.S. media. He lives in Provo with his family.

Beyond PCs: How Dell became the best end-user expert in the room

By Blake Snow

Not long ago, Dell made its living making and selling computers. They were good at what they did. Their hardware helped make PCs mainstream in the '90s. They were the no. 1 computer company at the turn of the century, selling desktops, laptops, and servers to consumers and companies big and small. They're the no. 1 monitor manufacturer in the world.

They did all this by being faster and cheaper than the next guy—without sacrificing quality—thanks to a revolutionary "built to order," global sourcing, and e-commerce approach.

But then smartphones happened. Mobile happened. People started bringing their own devices to work. Time to pivot.

If Dell were going to lead in the multi-device era, they would have to do more than just sell great hardware. They would need to contextualize their products, help make sense of and manage them, and become a respected IT advisor. They would need to sell virtual computers as well as physical ones, services as much as products, and do all this exclusively for enterprise customers.

Five years later after a string of strategic acquisitions, lots of soul-searching, and becoming the world's largest privately owned company last year, many say they've done just that.

"It's a smart strategy," says technology analyst Tim Bajarin of modern Dell. "Half of their enterprise business comes through physical PCs sales," he says, which allows Dell to upsell other services, including innovative IT management software and cost-effective virtual computers. "It all revolves around their enterprise ecosystem strategy which should help them continue on the path of growth."

The transition hasn't been easy, however. "Several years ago, I was attending a Citrix tradeshow," recalls Erica Hilgeman, a virtual desktop evangelist at Dell. "We were just starting our desktop virtualization business (before acquiring Wyse), and I thought to myself: 'We're not going to beat these guys.'"

Turns out, they didn't need to. Rather than directly compete, Dell made a calculated decision to become an enabler of virtual desktops over time, supporting both Citrix and VMware installations, as well as Microsoft and Dell's own improvements to the technology. They acquired Wyse, the inventor of thin clients and volume leader of them. And they did it in an open and inclusive way for a very specific reason.

“We don’t have a dog in the platform fight,” explains Jeff McNaught, executive director of Dell’s virtual desktop business. “Since we support all major desktop solutions and thin client operating systems in addition to our own innovations, we don’t have to force the issue, putting us in the best position to objectively analyze and recommend the ideal environment.”

In other words, it’s no longer about competing ideologies such as Citrix versus VMware, VDI versus WSM, or even physical versus virtual desktops, Hilgeman says. “It’s about helping customers transition to the multi-device era. It’s about solving use-case problems over recommending and sometimes shoehorning self-interest technologies.”

That includes taking a platform agnostic approach, pairing the best technology with ideal conditions, and providing the necessary management software to secure, empower, and manage it all, she says.

Obviously, Dell wants buyers to choose their hardware, admin tools, and cloud know-how over the competition. But even in cases when a customer buys iPads over in-house Venure tablets, Dell can still improve the experience and manage it all. “When armed with our Enterprise Mobility or Cloud Client Manager, we can secure, provision, and mobilize just about any multi-device environment,” Hilgeman says.

It’s ironic, then, that Dell would accept such piece work, given their affinity to “end-to-end solutions” when describing their new total computing ecosystem. But as Hilgeman sees it, they’re okay proving their mettle one piece at a time.

“When clients experience our products, they gain trust and buy more. That’s been the case for Dell in all verticals, including physical and virtual desktops, servers and networking, and management software.”

That patient confidence stems from three specific things: Perspective, innovation, and a sense of responsibility.

As for the first, “I realized 5-10 years ago that the type of endpoint wasn’t going to mean much,” says Hilgeman. “Workers just need their stuff, regardless of platform or device. So long as we create a workspace where the user clicks on something and has no idea where it’s coming from, there’s no ‘there’ anymore—it just works.”

As for innovation, Dell has acquired more than a dozen strategic service companies, product portfolios, patents, and leadership talent over the last five years to make their end-to-end offering possible. And if user and critical reviews are any indication, Dell did it without sacrificing the quality of their important manufacturing business.

Lastly, McNaught explains the sense of responsibility needed to support such an ambitiously open ecosystem. “We’re the only ones that stand behind the entire offering, without passing the buck to another vendor when something goes wrong,” he says.

If something goes wrong at the server level, Dell will fix it. If BYODs are fighting with the datacenter, Dell will fix it. If storage or synchronization gets buggy, Dell will fix it.

“Only Dell does that,” McNaught emphasizes. “Our end-to-end approach makes migration to stateless computing and the cloud much easier than before. It not only acknowledges the consumerization of IT and BYOD, it gives forwarding thinking IT teams the total computing tools required to empower workers, boost productivity, and satisfy customers.”

You see, in just a few short years, Dell managed to modernize their deep understanding and rich history of personal computing to get with the times. Their deliberate strategy, impressive growth, and belief in themselves make Dell a serious enterprise competitor, if not the best end-user expert in the room.

“All they need to do now is execute,” concludes Bajarin.

Now trending: 4 reasons marketers might like Google's new Shopping Insights tool

How are people searching for products across the United States?

We wanted to know the answer to that question, so we built Shopping Insights. Produced by our solutions marketing team, the new "in beta" tool attempts to make sense of the millions of product searches taking place on Google everyday.

For instance, where are products spiking in popularity? Better yet, what are those products and how can retailers (and even wholesalers) avail and promote their inventory to meet immediate and future demand? Furthermore, how does product interest change over time? And how does search behavior vary by device, be it mobile or desktop?

Shopping Insights is the first step towards answering those questions and more, with the end goal of improving marketing effectiveness and ultimately customer satisfaction. That said, here are four reasons we think digital and even analog marketers might like it:

It helps them observe local demand.

At Google, we noticed an interesting trend over the last four years: a 34x increase in "near me" qualifiers when consumers search for something. As Shopping Insights reveals, Birkenstocks is one of those rising "near me" stars this year, up 70% nationally in annual search volume. Not only that, but interest in Birkenstocks tripled in Utah during the same period, demonstrating how demand often varies according to regional taste. To help identify, map, and act upon similar trends, Shopping Insights lets marketers filter and compare their product searches by city. This allows them to better gauge local shopping intent, and how it changes over time.

It segments interest by mobile, desktop, or both.

In the "I want to know, go, do, and buy" moments of life, Google users now increasingly turn to their phones. For instance, mobile searches for "Jordans" are 3X higher during 2015. In fact, total mobile searches exceeded total desktop searches in 10 countries this year, including the United States. As with geo-targeting, Shopping Insights lets marketers filter data by device type to better understand which products are more popular on which screen… and then plan their promotions accordingly.

It highlights nationwide, regional, and municipal outliers.

In addition to comparing queries relevant to you, Shopping Insights helps you identify larger trends that may be of interest. For example, the coolest sneakers nationwide. The timing of back-to-school shopping by region. Or how California and kids costumes dominated Halloween last year. You can browse these stories and more on Shopping Insights, all of which were curated by our team to inspire ideas for your own business. To keep you informed on the latest and greatest, Shopping Insights will add new trending products as they develop.

It reveals insightful patterns in seconds.

Every day, the majority of people use Google to reliably and quickly look for answers, discover new things, and make decisions. Built on the same technology and now available in the U.S., Shopping Insights brings similar reliability and speed to better understand product interest across time, location, and device.

This is just the beginning of an exciting journey. In the coming months, we plan to keep improving Shopping Insights to answer even more questions pertaining to the intent and context of product searches. To get started with products and geographies that matter to you, visit shopping.thinkwithgoogle.com.

Post-consolidation: How multi-channel retailers find omni-channel success

After finishing this report, readers will know how accurate their omni-channel measurements are, where to improve them, and what technology can help

Since stabilizing after the Great Recession of 2008, Macy's Inc. has been on a tear. Its stock is up 240% over the last five years, this despite the widespread retail decline affecting dozens of household names, many of them Macy's peers.

How did the world's largest fashion retailer manage to avoid similar contraction and even thrive in an increasingly online world? Company officials credit a clear understanding of how online behavior impacts and informs in-store conversions (and vice versa) and updated their customer engagement as a result.

"We used to have two separate, siloed budgets," explains Serena Potter, group vice president of digital media and mobile strategy at Macy's, while referring to the popular but short-sighted practice of separating digital from brick-and-mortar operations. "Today we really only have one marketing budget. We look at the best way to spend that, whether digital or offline, then focus on how they work together to deliver the most sales and best customer experience."

In modern marketing speak: Macy's went "omni-channel," treating customers as fluid shoppers that use their phones *a lot* to make more enlightened and spontaneous purchases. Yes, these shoppers buy more online than before, the driving factor behind physical consolidation. But these same shoppers also convert in-store twice as much as before, making them more valuable than ever, according to Google data.

Macy's isn't the only retailer reaping the rewards of omni-channel loyalty. Market researcher IDC recently found that omni-channel shoppers spend 30 percent more than single-channel shoppers. Consequently, the research firm predicts that top 150 retailers will have fully converted to omni-channel marketing by 2016.

How will they get there, and how can interested executives realize similar omni-channel success? What's required for marketers to incentivize integrated sales instead of sabotaging them? And what technology and measurement tools are needed to combine once disparate shopping experiences?

To answer those questions, we must first broaden our definition of "mobile-first" and analytics in general.

Mobile behavior requires omni-measurement

By omni-channel shopping, what we really mean is "how smartphones have converged offline and online shopping." Before, there was desktop or laptop shopping, something that was largely done out of store. It was asynchronous.

Now, roughly 75 percent of Americans [carry smartphones into stores]. They interchangeably shop offline and online in real-time, instead of going back and forth. To put it differently, they are "mobile first" in their approach. Rather than ask a store clerk for more information on an item in-stock, 82 percent of them search online for additional information, expert and user reviews, price comparisons, and discounts while standing in the aisle.[1]

For retail, "mobile first" is no longer where you put your software priorities. It is *the* priority for reaching consumers. All roads lead to the sale of a tangible product. But they all start (and often end) on mobile, which is a key behavior to modern purchase journeys. Said one buyer recently, "I want to get it done immediately."

To better understand an omni-shopper's purchase journey and ultimately reach them, you need to know a whole lot more about them. Default web analytics aren't enough. For a clearer picture, omni-marketing demands omni-measurement tools.

Of course, measurement maturity varies by retailer. Most find themselves at opposite ends of the omni-measurement spectrum. For example, starting marketers probably know the gender of individual shoppers; that she browses the website, looks for products in the 30-40 age group, lives in rural Michigan, and "occasionally" transacts in store. These marketers leave a lot of money on the table, however, since they can't track if an acquired customer ever became a loyal or lapsed one.

Omni-channel marketers, meanwhile, know so much more: that "she" lives five miles from the nearest store, converts 20 percent more often to outdoor promotions when in the vicinity of the store over the weekend, is more likely to buy red and blue items, wears medium, and bought recommended products such as complimentary shoes no more than seven days after an originating purchase.

Omni-channel professionals also know what she favors in store versus online, what attributes she primarily buys for, and which marketing programs help sell at varying times and places in the purchase journey. Not only that, omni-retailers understand that digital engagement drives in-store traffic—albeit with fewer, more calculated visits—and that omni-shoppers are more loyal because they constantly connect to the shopping experience.

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[1] Fun fact: Smartphone shoppers spend 15 hours a week researching purchases (Source?)

Consequently, omni-channel CMOs know how to motivate consumers to buy more often. They know how to greet the customer with the omni-context they need (i.e. showcasing the product they are most likely to buy). And they know how to allocate and optimize their merchandise accordingly, in real-time, and in line with omni-shopper insights.

How then, do omni-channel leaders like Macy's collect, interpret, automate, execute, and deliver insights? And just as importantly, how do they act upon them?

The "big 5" skills

After researching 1,500 multi-channel retailers, Google has identified five consistent skills of omni-channel success. Although different retailers possess and master different pieces of these, all five are required for accurate omni-measurement, or rather a complete view of modern purchase journeys. They are as follows:

1. **Data.** This is everything a retailer and supplier collects in separate databases (both online and offline activity). Enabling technology includes popular software from Oracle, SQL Server, MySQL, Netezza, and others.
2. **Analytics.** The software used to find meaning and glean insights from data. Popular software includes Omniture, Google Analytics, Coremetrics, Adobe Analytics, SAS, Webtrends, and others.
3. **Intelligence.** The software used to automate promotional marketing. Popular tools include apps from Palisade, Eloqua, Marketo, IBM, SAS, Teradata, and others.
4. **Execution.** How insights from analytics and intelligence are used to evolve future promotions. Enabling technologies include Adometry, Epiphany, IBM Interact and IBM Marketing Operations, Kenshoo, and others.
5. **Delivery.** When and where omni-retailers outsource campaigns to specialized vendors. Enabling technology includes Infor, Aggregate Knowledge, BlueKai, Convertro, Datalogix, Epsilon and others.

For example, "starter" retailers such as smaller businesses typically understand a little of each of the above, with the exception to Intelligence. They can do basic reporting, measure operational efficiencies, and know general demographic information about their shoppers. of their shoppers. But they can do little beyond that.

Moving up, "intermediate" omni-retailers such as Nordstrom can target, segment, and customize individual messaging based on what they think the customer will buy. This allows them to predict responses based on past consumer behavior. But at this stage, "intermediate" marketers are are ill-equipped to increase purchase frequency, reduce purchase latency, and make real-time decisions using centralized dashboarding tools.

"Advanced" omni-retailers such as Macy's and Sephora, however, can do just that. They know who the customer is, when and where they like to shop, and how to get them to buy more often. The can do most of what “starter” and “intermediate” marketers hope to do, including making relevant product recommendations and targeting shoppers by location (rural vs. urban), generation, (millennial vs baby boomers), or loyalty-level. But they can’t do all of the above in real-time. Which brings us to…

“Master” omni-retailers. Lucky for Amazon and Walmart, the future of omni-measurement is now. These two goliaths hyper adjust their pricing and inventory in minutes (if not seconds) of spikes and surges in demand. They know top performing channels, the most active shoppers by time of day, which items and attributes sell better to which customer on which channel, and the top conversion paths. Additionally, they can automate media buying, geo-target in real-time, automate campaigns with machine learning, and funnel specific products to be sold in store.

“Master” retailers still struggle, however, with online-to-store and cross-device measurement of individual consumers, which some experts cite as “the holy grail of omni-measurement.” For instance, Google Store Visits can only estimate the aggregate behavior of omni-shoppers, as opposed to individual ones. That’s better than nothing, officials say, and just the start of of what’s to come.

As an encouraging development, savvy providers are already matching cookie data with store transactions in some cases. The main point being where there’s a will, there’s a way. The most advanced omni-retailers won’t stop at what’s available. They’ll acquire, retain, and develop the talent needed to realize online-to-store and cross-device measurement sooner than later. That’s what “future” omni-retailers will do.

Wherever you fall on the omni-measurement maturity spectrum, attaining these skills are not something that is “once and done.” As data increases and further informs your insights, you must mature your measurement tools and decisions accordingly. What’s more, analytics and intelligence dexterity still lag at many retailers, even ones that are otherwise advanced in their understanding of omni-shopping. The key to staying ahead is recognizing what you don’t know.

Google-ing the gaps

Over the last century, retail has shifted about every 25 years, according to Google research. From the start of post-industrialization in the 1920s to pre-modern retail of 1945; the development of post-WWII retail to the 1960s, which gave rise to category killers and big box retailers until 1990. Ever since, retail has consolidated though today. Having largely bottomed out, surviving stores find themselves in a brave new world of omni-channel, cut-throat, and “give it to me now!” shopping.

As Macy’s and others exemplify, however, retail can not only withstand this climate, they can thrive in it. After all, we still live in a consumption economy with a high demand for commodities, wants, necessities, and even digital novelties such as break-out apps and impulsive micro-purchases that smartphones gave wind to.

All told, consumers don't care if their purchases come from a store, a website, an app, or something else. But they still very much identify with brands and want to engage with them whenever (and wherever) the urge strikes to shop. Consequently, the omni-channel victors will be those who fully grasp omni-measurement across channels, locale, and devices.

The lesson here is to scrutinize how your employees, teams, and company are set up to support omni-shopping behavior, then incentivize and reward them for running innovative campaigns that contribute to the sale, wherever it happens. To do that, you must identify the gaps in your data, analytics, intelligence, execution, and omni-delivery abilities. Total omni-measurement is the answer.

Our message to you: Google tools can help you measure the moments that matter. We help marketers make informed decisions by understanding their audiences and actions of ads at every step of the purchase journey. In addition to our own influential algorithms and expertise, we recognize and play nice with competing technologies and platforms in the event our intended product isn't the best fit. We can show you the value of omni-shoppers today, and what interactions will encourage them to buy more tomorrow.

For those seeking additional assurances, Macy's, Sears, Office Depot, and other recognized retailers depend on Google omni-measurement every day to draw digital users into stores, offer a delightful mobile experience, and measure digital's impact on retail. Using Google Store Visits, for example, Sprint uncovered that 90% of its customers start their journey online but buy in-store. PetSmart discovered that 18 percent of search ad clicks resulted in an in-store visit within 30 days. And Office Depot tripled its return using Local Inventory Ads.

In other words, "We've always known that our digital efforts had an impact on store traffic, but it was difficult to quantify," says David Buckley, a chief marketer at Sears. "Google has helped us with our understanding of that and the impact our ad formats have on all channels."

To complete your understanding of omni-shopping behavior, visit Google omni-measurement.

What’s a “cloud client computer”? Dell fesses up.

Describing computers used to be easy. First they were tall machines that lined the walls of laboratories. They were monitor-less. Men in white lab coats poked and prodded them for simple calculations.

In the ‘80s, those machines became powerful and personal. Placed atop desks or rested upon flesh and femurs, the *personal computer* could be manipulated and acted upon graphically, making it accessible to all.

In the ‘90s, those same PCs started communicating over the Internet. Adoption went mainstream, and we entered the information age.

So where are we today? The cloud era? The mobile era? Post-PC perhaps?

The correct answer is “none of the above.” The majority of Americans—32%, in fact—describe the current era of computing as “multi-device,” according to a recent Google Consumer Survey commissioned by Dell cloud client-computing. Of the 1,100 respondents polled, “mobile” finished second with 27% of the vote; “cloud” finished third with 20%.

In other words, describing the current era of computing is complicated. “It’s not like in the past when we used one, general-purpose computer to get things done,” says Jeff McNaught, chief strategist at Dell. “We use numerous devices now to access a single pool of personalized data and apps. Keeping them straight can be a challenge, especially for organizations.”

To that end, the cloud client-computing team at Dell chooses to focus on end-user computing. In other words, it doesn’t matter how or where the computing takes place, so long as the user gets the apps and information they need to stay productive and connected.

“It’s why we emphasize the client aspect,” McNaught adds. “Cloud computing in general includes a lot of back end mumbo jumbo that users don’t care about, and it suggests a more homogenized, if not public, computing experience. We aim to deliver personalized computing to end users and IT professionals, regardless of device.”

With so many cogs in the modern computing environment, however, the goal isn’t exactly straightforward. “Cloud client-computing is one of the most complex solutions we sell at Dell, thus it’s difficult to produce an effective message without feeling the need to further explain the nuts and bolts behind it all,” says Eric Selken, marketing manager at Dell. “It’s a harder sale than PCs and servers.”

The reason: Cloud client-computing requires a lot more moving parts. Reliable infrastructure (i.e. The Cloud), empowering device management software, company issued smart devices in instances where the individual doesn't bring their own, "bring your own device" support, and end-user software to virtualize a desktop.

That's a lot to juggle. But the long requirements list has the cloud client team chomping at the bit. "As recognized experts in both front and back-end cloud computing—not to mention the required in between software to administer it—we can make the transformation to the multi-device era less complex for IT professionals," says Steve Lalla, vice president at Dell. "Our end-to-end or total approach sets us apart from competitors that don't connect all the dots."

Not only that, it delivers meaningful results to customers. A Boston healthcare company, for example, reduced IT maintenance costs by 50% and onboarding by 75% after switching to cloud client-computing. It also boosted IT productivity by two thirds.

Similarly, the University of Connecticut saved $300,000 after virtualizing 700 desktops with Dell. A $2.4 billion dollar footwear company reduced deployment times of 4000 desktops from 1 1/2 hours to 15 minutes with Dell, resulting in a 600% improvement to IT management.

In addition to saving dollars and boosting uptime, cloud client-computing solidifies security. Numerous financial institutions, including Swiss banks, favor the virus immunity of Dell Wyse ThinOS when securing highly sensitive customer data.

But those savings and security aren't a one size fits all. "Companies can't use virtual desktops everywhere," says Travis Brown, global desktop virtualization solutions lead at Dell. "But every company can use it somewhere. The added benefit of cloud client-computing is that it's not a VDI company looking for a specific use case; it's an adaptable solution that plays nice with all virtual desktop technologies, depending on best fit."

Still, the promise of energy savings, lower costs of ownership, and doing more with less via cloud clients requires a fresh perspective. "After successful implementation of virtual servers, there's an assumption the end user environment will be easy," says Brian Slaughter, integration sales at Dell. "It's not. Datacenters are controlled environments. End users can be anywhere on the planet, wireless or wired, VPN or local building. So often our biggest competitor is the customers own perception of technology readiness and the investment to get it there."

Nevertheless, it's a reality worth fighting for, says McNaught, even if a little education is in order. "Although terms like cloud clients and desktop virtualization are unfamiliar to some, their realization is an important part to modern workforce computing. I believe cloud clients will do to the multi-device era what Dell's original 'built to order' innovation did to PCs; make them more useful, accessible, and affordable."

As for that doozy of a name, I ask McNaught if he aspires to make "CCC" as commonplace as PC. "No, no," he laughs. "It's not a perfect. I get it. But we'll do our best to make cloud client-computing — or at least the implementation of it — as accepted today as the once abstract ‘Internet’ was before.”

To see how virtual desktops might improve your computing environment, please visit cloud client-computing

About the author: Having written for half of top 20 U.S. media, Blake Snow helps Fortune 500 companies tell better stories with insightful advice and daring words.

The future of thin clients according to the company that invented them

By Blake Snow

Turns out, thin clients were an accident. Like Coca-Cola, everyday plastic, tire rubber, and even the beloved chocolate chip cookie, the so-called "windowed" or "graphical" terminal computer was never meant to do what it does today or will tomorrow.

"The story of thin clients is the unlikely invention of an industry," says Jeff McNaught, co-inventor of the machine. "By 1995, Compaq (later absorbed by HP) had overtaken both IBM and Apple as the hottest PC manufacturer, after intelligently shifting to cost-based hardware," he remembers. "Rather than fight for scraps, however, Wyse senior management asked me, Curt Schwebke, and a couple of engineers to 'go figure out what we'll do next.'"

That same year, McNaught and company tinkered with several prototypes before settling on specs that were even lighter than Compaq's. "We wanted to make terminals cool again," he explains. "But that could never happen with the text-based nature of traditional terminals. So we came up with a lightweight, graphics and mouse-driven device called the Winterm 2000."

But there was another challenge the team faced. While centralized computing remained the most cost effective architecture, it didn't have the necessary app support to gain traction. So the Wyse team turned to Citrix—"then a company with about 50 employees," McNaught says—to get their "windows terminal" or thin client to play nice with Microsoft Windows and all the apps that came with it.

The partnership worked. Winterm won "best in show" at the 1995 Computer Dealers' Exhibition in Las Vegas, and was later awarded the thin client patent. "Bill Gates came to our booth, Microsoft flew us out, and suddenly terminal computing became a viable way to deploy enterprise desktops," McNaught says.

Although thin clients never went mainstream, at least in a consumer sense, they've enjoyed sustained interest over the years from enterprise, finance, government, and education customers, McNaught says, due to their security, cost, and maintenance benefits. But they also served as a 15 year precursor to the rise of distributed or "cloud" computing, which is really just a modern variation on centralized and terminal computing.

So what's next for thins? They've expanded recently to further blur the lines of what a company issue computer can look and work like. After acquiring Wyse in 2012, Dell setup "cloud-client" laboratories throughout the world to help enterprise customers understand the three different types of thin clients it sells today—thin, zero, and cloud—when and where they can favorably replace a fleet of PCs, and which middleware, end-user interfaces, and back-ends work best for any given use case.

"The fundamental architecture of thin clients is being used in all end-points in which PCs aren't ideal," says McNaught within an earshot of Michael Dell, who strategically views Cloud Client-Computing as a key growth area for the company.

While thin clients continue to expand, they're also getting smaller. In January, Dell launched Cloud Connect, a "micro client" that costs 50% less than the company's cheapest current thin client. And it does all this without sacrificing accessibility, affordability, or the ability to transform into any device a worker needs it to be.

More than that, though, McNaught believes the micro client will largely power the internet of things and the increasing number of screens we encounter everyday. "In the future, screens will be everywhere, just like in the movies," he predicts, citing *Blade Runner*, *Minority Report*, and *Space Marines* as influences. "They'll be in our cars, homes, and wherever we look for information and media."

But those screens won't be powered by smart devices, PCs, or all-in-one computers, he says. "They'll be powered by thin devices such as Cloud Connect. They'll be powered by low cost, energy efficient, and wireless secured devices that we used to call 'dumb terminals,' only this time, they'll truly help us create order from chaos."

Not a bad prognosis for such a low-profile computer.

Workforce computing isn't an either/or proposition. Long live the multi-device era.

[insert image of cloud client-computing light fixture]

In the second floor commissary of the Dell cloud client-computing building in Silicon Valley, there is a light fixture. It is unlike any other you've probably seen. Rectangular. Beautiful. Modern.

It is made of hundreds of translucent glass orbs, hung by corresponding wires from the ceiling. Each six-inch sphere encases a small canned light, no bigger than a AA battery. On their own, the small globes would emit little light. But together, they produce a powerfully rich source of clarity over an 8' x 3' utility counter, not to mention the entire room.

Why should you care? The light fixture parallels Dell's contemporary approach to workforce computing. No longer do workers use a singular desktop, laptop, or even server. "In the multi-device era, end-users access apps and files across dozens of OS agnostic devices, more than half of which are mobile," says Dan O'Farrell, senior product manager at Dell.

Powering those devices are hundreds—sometimes thousands—of smart servers, which many people call "the cloud." Without each other—including legacy PCs that continue to play a vital, albeit lesser role in "the fixture"—each device is limited. But together, when designed, deployed, and directed well, they enable what Dell calls "end-to-end computing." They enable end-user choice.

"Although I unapologetically evangelize the benefits of cloud clients, the multi-device era is not an either/or proposition," says Jeff McNaught, chief strategist at Dell. "It's not about choosing smartphones and tablets over desktops and laptops, or even replacing old form-factors with new—although that's sometimes needed. The multi-device era is really about identifying which device works best for a given working environement."

That ethos drives the Dell brand today. It reconciles virtual desktops with traditional PCs. It acknowledges PC as a still popular gateway device (link to "How to sell cloud clients in the multi-device era") to a less transactional, total computing solution.

For Dell and its stakeholders, it's simply the right approach, says McNaught. "Cloud client-computing creates customers for life, because it offers more choice in the long run," he explains. "Things like BYOD apps for smartphones and tablets, physical desktops and laptops for heavy lifting, and thin clients for everyday work. And, of course, the mother brain to synchronize and mobilize it all, no matter the device (aka Dell's infrastructure expertise)."

To learn more, see dell.com/cloudclientcomputing.

Backed by science: 14 ways to boost your productivity

By Blake Snow

For citrix.com—There are a lot of productivity myths. For instance, early birds are more productive, structure kills creativity, adding resources increases output, and more. Although well intentioned, these are all wrong.

So what works? What productivity hypotheses have been tested and proven by science? After sifting through dozens of top search results, reports, and studies, this is what I found. The most convincing, substantiated, and established productivity strategies:

1. Eat productive foods (and breakfast). Did you know that sugary foods such as soda and candy — and heavy, rich foods such as burgers and fries — are actually counter-productive and reduce energy and slow your thinking? Well they do, according to multiple nutritionists. So instead of reaching for what you mistakenly thought boosted your energy, reach for fruit and berries (any will do) or cognitive-enhancing snacks such as almonds, walnuts, and avocados instead. Since the brain consumes extra fat during intense periods of desk work, also add salmon, eggs, full fat yogurt, leafy greens, and even dark chocolate (in moderation, of course) to your diet. And learn to like breakfast. Your brain, body, and productivity will thank you.

2. Aromatize your office with orange, rosemary, or lemon. Aromatherapy, the study of how scents affect one's mood and wellbeing, is just a hundred years old. In fact, science still can't explain why some scents have an impact and others don't. Nevertheless, if you want to boost your energize and invigorate your output, perfume your workspace with orange, rosemary, or lemon, says a recent University of Maryland study. No, these or similar scented oils won't cure cancer or make your quarter. But they can have a supportive impact on your psyche. Use them to your advantage.

3. Work 40 hours or less each week. The 40-hour work week wasn't just invented. It was scientifically devised by revolutionary Henry Ford in the 1920's. At the time, no one agreed upon an optimal work week, so most proprietors overworked their talent, thinking it led to greater output. That's wasn't the case. After conducting experiments with his workforce, Ford found that reducing the workweek from six to five days and 50 to 40 hours resulted in greater, sustained productivity. Jason Fried, an avant-garde employer from Chicago, takes his labor analytics one step further and reduces office hours to a four-day, 32-hour workweek for six months out of the year. "When there's less time to work, you waste less time," he told the New

York Times. “With a compressed workweek, you tend to focus on what’s important [and] encourage quality time.”

4. Accept that “done is better than perfect.” If you insist on perfection, your output will be limited. At least that’s what one Canadian researcher recently proved. Yes, perfection can increase quality, but diminishing returns are also real. As such, perfectionism is self-defeating behavior when it comes to sharing your creation with the world. “The more perfectionistic [someone] is, the less productive they are,” the study found. Instead, workers who spend more time than a task requires or are unsatisfied with their output would do well to adopt a new mentality: “Done is better than perfect.”

5. Stop multitasking. Studies show that multitaskers are less productive, up to 40% less. This is because they fail to prioritize and spend abnormal amounts of time switching between unfinished projects rather than using the cognitive rewards of finishing to encourage more starting, more doing, and less time-wasting. In other words, multitasking is “feel good” behavior, not productive behavior, according to Ohio State University research. To overcome this temptation, make a prioritized task plan and work your way down the list, breaking larger projects into smaller, more digestible chunks that are less overwhelming to undertake. For productivity, slow and steady wins the race, not sprinting and constant burnout.

6. Just start it. Simply beginning an elaborate, important, or otherwise challenging task is the biggest barrier to productivity and procrastination, says one University of Mississippi study. The good news is the brain really likes to finish tasks it has already started. So much, in fact, that starting a project is more than half the battle to finishing, since there are such powerful dopamine rewards for finishing something. There are no such rewards for starting, however, so you have to push yourself to begin if you want to cross the eventual finish line.

7. Play music. Listening to your favourite music at work puts you in a better mood, which results in faster completions times and better decision making. That’s what one study cited in the New York Times found. Those who listened to music also came up with better ideas than those who didn’t. What kind of music? Anything that improves your mood. But music such as classical without lyrics tends to enhance concentration and distract less, the Mayo Clinic found. Choose wisely.

8. Exercise regularly (mornings work best). I could fill this report with thousands of findings showing how regular exercise makes everything better, including productivity. But I won’t because you already know that. What I’ll do instead is encourage you to start small (if you haven’t already); just 20 minutes a day of some kind of activity. That alone, especially when coupled with morning exercise, often provides enough momentum to make a habit of regular exercise, and improve your mental, physical, and productive well-being in the process. Regularly exercise isn’t easy. But it sets the tone for nearly all of the other items on this list. It results in more energy, less stress, better sleep, and clearer thinking. It is the force multiplier of productivity.

9. Batch tasks. Due to misguided multitasking, many people stay with tasks for just three minutes on average. That's rarely enough time to get things done. To make matters worse, it takes another 23 minutes on average to return to a distracted task, the University of California found. That equals a lot of time wasted. Instead of processing tasks as they come in from all directions, group your meetings, email, writing, reading, and expensing into designated chunks of time. Said batching requires discipline and rigid scheduling. But like single-tasking, it increases focus as well as output and is the only way productivity assassins arrange their workday.

10. Upgrade your ambiance. You can do this in a variety of ways. For example, if you need to get creative, dimming the lights "elicits a feeling of being free from constraints and triggers a risky, explorative processing style," one study found. Another study discovered that people perform better when they have plants on or around their desk, or at least spend their break time outside among nature. A third study by Cornell University found that when office temperature was increased from 68 to 77 degrees Fahrenheit, typing errors fell by 44% and output increased 150%. That alone is $2 per worker per hour in productivity gains. So consider your ambiance. It makes a difference.

11. Set self-imposed deadlines. To be more productive, you must shorten your turnaround times. To accomplish this, you must set hard deadlines ahead of schedule for yourself and meet them. Doing this is one of the most effective ways to overcome procrastination, one government study found. Not only do self-imposed deadlines increase your output, they improve quality, the study also found. Of course, externally imposed deadlines are even better (say from a boss), but most work deadlines are set by you, the worker. The more you self-impose by adding completion targets to your calendar and sticking to them, the more you'll accomplish.

12. Make decisions with data instead of guessing. Workers and companies that base decisions upon substantiated data gain 5% more productivity and profit than those who don't, a recent study by MIT found. That might not seem like much, but a 5% increase in profit and productivity is significant enough to separate winners from losers in most industries, the report found. To do this effectively, you must constantly challenge your beliefs, ideas, groupthink and worldview. Thanks to Google, that's not as hard as it used to be. Usually a quick search leads to meaningful results and empowering information to base decisions upon.

13. Focus for 90 minutes, break for 15, repeat. There's a misconception that great talent stays focused all day, every day, without ever breaking. That's simply not true, research has found. Unlike average or low-performing workers that get distracted or spin their wheels without leaving their desks, great talent is more disciplined when it comes to perfecting their craft in 90 minutes of intense focus followed by 15 minutes of breaking and planned rewards. Often called "finding your groove," working in this manner leads to immense productivity. So work hard, break often, then rinse and repeat.

14. Sleep eight hours a night. A lot of people claim to operate on fewer than eight hours of sleep per night. But fewer than 10% actually can, a recent Harvard study found, and most of those require at least six or seven. In truth, sleep deprived individuals perform just about as bad (or worse) than someone intoxicated by alcohol, the study found. That goes for mental focus and job performance as much as motor skills. “For many people, getting sufficient sleep is increasingly under assault,” writes Julia Kirby for Harvard Business Review. “In the three-legged stool of good health, nutrition and exercise are constantly discussed, while sleep has so far come up short.” The takeaway: Buck up and start sleeping a full eight hours if you want to be more productive.

About the author: Blake Snow is a bodacious writer-for-hire, adroit storyteller, and daring content strategist to Fortune 500 companies. Previously he worked as a featured contributor to top 20 U.S. media. He lives in Provo with his family.

Coming clean: How IT finds meaning in “The Cloud”

By Blake Snow, compliments of Dell cloud client-computing

There’s a reason companies use buzzwords. They sound impressive (if not more confusing), are fashionable, and attract more attention than commodity words.

As such, marketers often rebrand or freshen up the language of existing products to suit whatever’s in favor. For example, the practice of “green washing” makes certain products seem more environmentally friendly, regardless if they actually are. “Health washing” makes food items sound more nutritious, even if they’re not.

In computing, “the cloud” is no different. As such, “cloud washing” happens frequently. And everyone does it, according to men wiser than me. “Nearly every established hardware and software company has attempted to reposition their legacy products as cloud solutions,” says Jeff Kaplan, managing consultant at Think Strategies.

“Pick any ad by a traditional IT vendor with the word ‘cloud’ in it,” echos George Reese, executive director at Dell Cloud Computing. “It’s almost certainly some form of cloud washing.”

Companies do this, of course, to stay relevant or to bide time. The primary targets? “Typically anything that’s hosted on the Internet is game,” says David Linthicum of Cloud Technology Partners. “Such as software delivered over the Web that doesn’t support basic cloud characteristics including multi-tenancy or the ability to self- or auto-provision.”

Since gaining traction at the turn of the decade, “the cloud” has been mislabeled and widely defined as many things, which furthers its confusion. “If it means everything, it really means nothing,” Linthicum says. “That’s the issue we’ve been dealing with since the buzzword first emerged.”

To make matters worse, those in charge of administering and chaperoning “the cloud” are often the ones most susceptible to cloud washing. “I don’t think IT admins are particularly good at spotting true technology,” says Reese. “In fact, they’re more likely to be taken by cloud washing than executives.”

The reason, Reese explains, is that IT directors are often looking for check-listed features. So if something from a trusted vendor has “cloud” written on it, a director might pull the trigger, even if the executive bossman actually wanted “something like Amazon Web Services.”

In other words, metered usage. Pay-as-you-go instead of the traditional buy-more-than-you need every month, quarter, or five-year lifecycle. “Along with Internet delivery and auto-provisioning, pay-per-use is a distinguishing factor of true cloud technology,” says Jeff McNaught, chief strategy at Dell cloud-client computing.

But isn’t “cloud” just a sexier word for “Internet”? After all, "the cloud" was inspired by the same symbol used to depict the Internet on a flow chart, reports Tech Target.

While the two technologies are similar, there are meaningful distinctions. “The Internet provides massive connectivity between consuming and producing computers,” explains Linthicum. “Cloud computing consumes technology over the internet in different ways that are more cost effective, resource efficient, and more agile.”

For instance, the aforementioned ability to pay for only the resources used—like house utilities—to provision resources as and where needed once the utility or “cloud” is in place, and the ability to scale efficiently (i.e. use as little or as much as peaks and valleys demand) is what truly sets cloud computing apart.

“I think ‘the cloud’ will ultimately replace ‘the Internet’ as a generic term in some way,” predicts Reese. “Until then, the terms ‘web,’ ‘Internet,’ and ‘cloud’ will live side-by-side as interchangeable terms, even though they are technically distinct concepts.”

The more you know.

The following commercial editorials were created, written, and prepared by Blake Snow, an expert content strategist to Fortune 100 companies and prolific feature writer to half of the top 20 U.S. media outlets and more.

More data, more opportunity: Top 5 ways to harvest big data

Respected physicist Stephen Hawking once said, “The greatest enemy of knowledge is not ignorance, it is the illusion of knowledge.”

Unfortunately for some, big data creates an illusion of knowledge. Simply having it or capturing it isn’t enough. You also need the right people ordering it, the right people harvesting it, and the right analytics for tracking it.

“As it has always been with any data project, poor planning, fuzzy objectives, and lack of understanding can easily result in misleading insights,” says Michael Nadeau, publisher of Data Informed.

That was the case last year for one retailer. After capturing a daunting amount of data with online sweepstakes, the makers of O’Neill, Rusty, and Metal Mulisha apparel didn’t know how to act upon it.

“We over-engineered it,” said the company’s Daniel Neukomm. “We were never able to fully digest and respond to that data. That speaks to the theory that big data is only as good as your ability to use it.”

That’s not uncommon in retail as a whole, says [name withheld], CEO of [client company that contracted me to write the story. “Retailers have more data than they know what to do with, and it’s spread thin across a variety of siloed databases tracking both online and brick and mortar transactions.”

The same is true of other industries. So what’s a chief executive to do? When it comes to harvesting big data, here are five things every decision-maker should know:

Have the right people working with it. Executives, middle managers, and IT folk are very different people, with very different goals and mindsets. As such, communication breakdowns are not uncommon when requesting and handling data.

“Analysis suffers from a divorce in knowledge between the orderers and the providers of the data,” says Jana Anderson, a researcher at Pew Internet. Thus, a little education can go along way to ensure that realistic expectations are being made and that executives are getting the insights they seek from data administrators.

Put data in context. Have you ever seen the photo example of a man shoving a lady down, only to discover upon widening the frame that he was pushing her away from a speeding car? Not only is context crucial in judging a physical confrontation, it’s key in understanding big data. “Knowing the fact of what happened—a bump in web visits, an increase in cart abandonment, whatever—rarely tells you why it happened and what to do about it,” says [name withheld].

Obviously, the “why” of many things remains a mystery. But a hyper-focus on asking why a data abnormality happens is a powerful tool in combating confusion. When coupled with the right people (i.e. see above), contextual thinking is to a big data harvest what water is to a field crop.

Organize first, ask questions later. Of course, before you can ask good questions of your data, you’ll need to plan a specific campaign. Not only what you want to track, but how you’ll track it.

“Measuring the ROI of a big data project can be easy — money saved due to earlier fraud detection, for example,” says Nadeau, “but in many cases it is difficult. How do you put a dollar figure on being able to react more quickly to customer sentiment on social media?”

That’s something big data organizers need to answer or at least attempt to in the most measurable way. As with all things in life, big data without a plan usually fails. So before answering “why,” you’ll need to put yourself in the most favorable position to answer that question.

Get your technology in order. Big data vendors are a dime a dozen these days. After all, the ability to perform analytics faster, cheaper, and on larger datasets presents a sizable business opportunity. But when selecting an appropriate technology platform for managing data, you’ll want to ensure it grants proper access to decision makers, and not at the mercy of the IT department.

“When dealing with large amounts of fragmented data, a good system will facilitate better access for executive users,” [name withheld] says, which coincidently, is the reason he started [company withheld] after selling it to a top 10 software maker. Not only does this reduce communication breakdowns when ordering and handing off data, [name withheld] says, but it can reduce the time it takes to generate that popular report from a week to just 10 minutes.

“Once disparate data streams are accessible in real-time, in one place, in a consistent fashion, data suddenly becomes much more powerful and decisions are much more impactful,” he says.

Start small. There are still a lot of unknowns when it comes to big data. And there’s certainly a learning curve. Which is why it’s imperative to start small. As Nadeau puts it, “Find a problem you can test big data technology on without a huge investment and the risk that comes with it.”

For Neukomm, that meant avoiding the noisy data he collected last year, while integrating smaller insights into proven email and mobile marketing campaigns. “Now we focus on things we know work and not trying to be overly flashy and overly technical,” he said.

More data, more problems: The trouble with big data

Data has gone viral. According to IBM, 90% of all the world’s data has been captured in the last two years alone.

What’s causing the spike?

While social software, web analytics, geo-tagging, data-sharing applications, and a gazillion lines of code to track our every online move certainly shoulder much of the blame, the real culprits are mobile devices—information-sensing, location-based, and take-anywhere computers with which to create data from previously offline, non-digitized locations.

Yes, Blackberry introduced the corporate world to smartphones in the early 2000s. Apple made them objects of desire with the unveiling of the iPhone in 2007. But smartphones didn’t go mainstream until the last couple of years, which explains the exponential growth.

And therein lies the first problem with big data. Much of it — if not most of it — is noise. Trivial stuff like what we had for lunch, water cooler talk. Stacks of hay that abscond the needle and complicate the harvest of actual signals.

Digital photos reflect this problem. Since "film" is no longer scarce, most photographers take a lot more photos than they used to, often resulting in dozens of bad shots among a single decent shot. Noise that if unorganized or efficiently stored, reduces the immediate value derived from a photo library.

Similarly, sorting through big data requires conscious effort to get the best results. "Twitter is a great example of this," says [name withheld]. "It's an overwhelming gush of information every second. But thanks to filtering technologies, users can control what they see to discover the right information."

If much of the recently acquired data is noise, however, is the capture or storing process something that should be improved? Popular opinion says no; the thinking being that you should capture everything first, then worry about finding value in it later.

But Jana Anderson, researcher at Pew Internet, says many of the experts she's spoken to challenge that convention. "Some worry that our digital systems of storage and dissemination will not be able to keep up," Anderson says, which compounds the already difficult task of processing the data we already have.

Not only that, but "a lot of old data has not been digitized and much of the digital data is sloppily organized," she says, which further muddles our ability to harvest good information.

Or as one insider put it in Anderson's latest report, "The fact that most data is unstructured is a huge issue, and I doubt that we will solve the problems associated with getting meaning from that morass."

Even in cases where big data is effectively captured and well organized, there's a real temptation for handlers to create false correlations with it. "Data that's been through too many hands before it gets to you can be as bad as or worse than stale numbers," says [name withheld]. "And if you don't know how to use the data you have, then it doesn't matter when you get it; it's useless to you either way."

In that sense, many are in over their heads. So in an effort to appear in control, they'll knowingly manipulate it. "Big Data is not well matched to tiny minds," said another expert in Pew's latest study. "The data sets now exceed the capabilities of most business people. This will lead to huge abuse and misapplication."

Some abuses won't be intentional, though. Just simple communication breakdowns when dealing with such vasts amounts of data. "Analysis will suffer from a divorce in knowledge and context between the orderers and the providers of the analysis," one expert told Anderson.

Not only that, but the sheer amount of data may cause some to lose sight over what's important. For example, some handlers may be more concerned in doing clever things with data rather than ensuring its validity or giving the right people control over it.

If that happens, the science of deductive reasoning may eventually take a back seat. "It might impair risk-taking for the good," said one of the more critical participants to Anderson. "We will become more addicted to what the databases tell us. We'll depend more on models than instincts."

In sum, more data isn't always better. Not all data is created equal. And imperfect data handlers introduce a whole slew of additional reliability issues, bad interpretation chief among them.

But bemoaning big data for being challenging is similar to cursing a big mountain for being difficult to extract precious metals from. With so much opportunity inside, the endeavor remains worthwhile.

"Companies have spent billions of dollars on capturing and storing data, yet despite those investments, very few have found ways to drive real value from it," concludes [name withheld]. "Yes, there are challenges, but we are all becoming a bit more savvy about this every year. Big data can and will result in more powerful and impactful decisions."

How “moments” help retailers overcome media abundance

The world can be a scary place. This is especially true for retailers competing in the seemingly disloyal and instantly-gratifying mobile marketplace.

When driven by fear, the temptation is to loudly broadcast as many messages as possible. But the consumer is increasingly muting branded moments.

Why? Because we can. Because selfies reign supreme. Because we have an abundance of choice now.

Remember: As recently as a decade ago, marketers could reach 80–90 percent of their target audience by airing a commercial during popular shows such as *Friends*, *Monday Night Football*, or *60 Minutes*. That was the world of advertising scarcity.

Today, combined Internet use has surpassed all other media in America. And that time is split between millions of websites, apps, and devices, often in the same day. Welcome to the world of abundance.

What’s a retailer to do?

Think in moments. Leading retailers are already doing this. Walmart does it. Amazon does it. Home Depot does it. CVS does it. Target does too. They do this because the majority of Americans (i.e. 91% of smartphone users) whip out their phone to satisfy an immediate whim or moment of interest.

In this new world, consumers choose when and where to engage. We see them do this with the nearest device when checking the time, texting a friend, or experiencing a lull. Because consumers are in control, it’s easy for them to ignore brands or retailers that recklessly interrupt those experiences.

That all changes, however, in learning, planned, or even unexpected shopping moments. Those are the moments that really matter to brands—when people are looking for answers, discovering new things, or making a decision.

Google calls these micro-moments: the I want-to-know, I want-to-go, I want-to-do, and I want-to-buy moments. After introducing the world to search advertising and the power of immediate intent, the search giant figures micro-moments are the new retail battleground for customers' hearts, minds, and dollars.

They're not the only ones who think so. "The future of marketing starts with identifying these moments and learning how to make each matter," says technology analyst Brian Solis. And many of the above retailers credit "mobile momentum" to their recent success, including Target and Macy's.

But thinking in moments is just the start. To engender sales, retailers need to act on those moments. They can do this by proactively (but respectfully) inserting themselves in the content stream, being relevant, and being true to themselves in those moments.

For example, let's say a consumer is intently searching answers to a bike problem. That could potentially lead to selling a replacement part or even new bike. And the retailer that does the best job in helping the consumer solve their problem in the moment is in the most favorable position to eventually sell that consumer something they need, if not today then tomorrow.

To encourage transactions, you need to participate first in learning moments. Even when intent to purchase isn't imminent, acknowledge context and remain helpful.

In other words, moment marketing requires patience. It also requires permission-based consumer involvement before, during, and after a sale. That multi-dimensional relationship often includes reminder notifications, providing in-demand search articles, expressive and helpful storefronts (as opposed to overtly promoted ones), or in the case of Bloomingdale's, take-home bags that can be repurposed for later use by buyers.

Successful brands answer, teach, and delightfully express themselves in these moments. They resonate in these moments by staying involved in consumers' lives. By resonating with a consumer's values and reinforcing how that consumer likes to think of themselves.

How do you know where to draw that delicate line, though? Put your consumer hat on. Remember what it feels like to shop in an abundant world. Be the retailer you'd like to buy from. Understand that this human is just trying to make their way. Enable their choice but don't shock or trick them into picking you. Retailers who do that see little to no repeat customers.

Of course, moment marketing mostly happens on the digital side of omni-channel marketing. And digital underpins omni-channel marketing, both online and off. Hence, failure to mobilize your shopping efforts to digital will likely lead to even scarier retail outcomes.

But again, moment marketing shouldn't be driven by fear. It only succeeds when driven by a desire to better understand, relate with, and serve consumers not only in times of need, but in times of curiosity. *That's* how moments help retailers overcome media abundance.

How to stay focused in 24/7 world

By Blake Snow

For citrix.com—Humans are more distracted now than ever before, at least since we've started keeping records. Over the last decade, the average attention span has dwindled from 12 seconds in 2000 to just eight seconds in 2014, according to the U.S. Library of Medicine. The kicker: our eight second attention spans are one second shorter than a goldfish's. No joke.

Who or what's to blame for such abhorrent focus? "External stimulation," says the Library of Medicine. That's code for mobile internet, apps that vie for our attention, push email, social media alerts, work from anywhere, persistent connectivity, and our enthusiastic adoption of "the internet of things." In other words, the only person we can blame is ourselves.

What's a working professional to do then? You have three options, according to popular thinking: fall off the grid, stick with default technology settings for substandard productivity, or my personal favorite, set usage boundaries to upgrade concentration, contributions, and welfare levels.

For those interested in options one or two, this article won't be any help. But for for those interested in the latter, there's quite a lot you can do to stay focused in a 24/7 world. After extensive online research, here is the most celebrated and pragmatic advice for doing just that.

1. Turn off real-time alerts. Doing this is difficult. It may bruise your ego. But it's the most proven way to prioritize your attention and reduce distractions. To do this, you'll need to distinguish high-priority demands on your time from low-priority interruptions (i.e. assignments from your boss versus social obligations versus social media notifications versus goofing off enablers). Then you'll need to silence, hide, close, and delete all low-priority alerts, instant messages, and tabs from your phone, computer, browser—basically any software or communication that makes a demand on your attention. Willpower alone won't overcome the onslaught of notifications we face. If we want to get things done, we must prioritize and personalize our settings (rather than accepting default ones) and intercept the non-important alerts at the operating system level before they distract us.

2. Plan and reward yourself with regular breaks. Information or notification overload isn't the problem. Our inability to filter it is. In other words, goofing off is good… at the appropriate time. After all, it's human nature. So instead of ignorantly planning to work "eight hours straight," work in 90-120 chunks like prolific experts do, followed by rejuvenating and rewarding 15-minute breaks to socialize on Facebook, read the news, beat your highscore, or chat with a friend. As with all things in life, timing is everything here.

3. Find something to help you endure monotony. Filling out TPS reports is mindless task. But mindless paperwork will forever be part of the job. Even people who love their jobs have to endure monotony. Most of life is monotony, in fact. The trick is falling in love with repetition; falling in love with the process (if not boredom) of doing the same thing over and over again. For some that's mastering the process, being the best at it. For others it's listening to music or audio books. For Snow White, it's whistling while she worked. Whatever you do, staying focused is all about losing yourself in repetitive tasks. It's what we call the groove. To stay there, you must rise above the monotony.

4. Be deliberate with your time. Depending on the source, humans are capable of only 6-30 hours of intense focus per week. Our attention is finite and in no way equal to the amount of time we spend awake (16 hours per day on average). So we must be diligent about how and where we spend those limited hours of focus. For most that's early morning and late evening when distractions are at their fewest. Respect that. Then plan less productive meetings and menial work in the afternoon while allocating the really demanding tasks in the morning.

5. Stow your gadgets when appropriate. Even with alerts turned off, the allure of smartphones and the "demand anything" nature of the Internet are difficult (if not impossible) to fully ignore. They are *that* powerful. As an extra line of defense against their distractions, get in the habit of keeping your alert-less devices and connections out of reach, say during dinner, when having meaningful facetime, while on deadline, or at your kid's recital or baseball game. Also consider removing your phone or computer from your bedroom, which can have a measurable effect on your focus during waking hours.

6. Avoid chemical stimulants. Coffee, energy drink, sweets, and nicotine enthusiasts aren't going to like this, but chemical stimulants undeniably mess with our ability to focus. So kick your dependency on them and reap the rewards. If you must, health experts recommend no more than one dose per morning to get you going, so at least try to wean your dependency. Your mind, body, and concentration will thank you.

7. Embrace asynchronous communication. Turning off real-time alerts will innately facilitate this advice. But hyper focused producers take it a step further and defer all low-priority responses to the appropriate time. For instance, they email or text when appropriate instead of calling or meeting. They wait to respond to email, texts, or tweets until the high priority task at hand is complete. They get in the habit of batch processing non-emergency communication. This too requires honest prioritization. But it's an undeniable advantage for those who grasp it.

8. Practice metacognition (aka mindfulness). In short, metacognition is understanding which activities stimulate or calm the brain, explains Dr. Larry Rosen. Knowing this can improve the timing of your demands. For instance, checking email or listening to new music before bed is usually not a good idea. A metacognitive person knows this. So it's important to

Holiday rush: How retailers win big with micro-moments

Let me tell you something you probably already know. Shopping no longer begins the moment you walk into a store. It begins the moment you pick up a phone to search for something you want, need, or take interest in.

This summer, my two daughters took to the women's World Cup. While watching the U.S. National Team win their third world title, the girls got caught up in the moment. What did they do in that moment? They became fans. They seized the moment, picked up their phones, and searched for jerseys to buy.

During this upcoming holiday shopping season, many consumers will do the same. They will act on urges when and wherever they strike, something we call micro-moments. The "'I want to know, I want to go, and I want to buy moments."

To better understand how these moments impact modern shopping habits (window or otherwise), in June Google commissioned Forrester Research to study over 200 mobile and digital decision-makers (not just retailers). This is what we learned:

1. **Micro-moments are intent-driven.** The consumer isn't just passively browsing a news feed, but rather they're searching actively for information about a product, about where a product is located, or about how to buy that product.
2. **Mobile has fragmented marketers.** Although most organizations recognize mobile's impact on customer behavior, only 2% of marketers report being "mobile ready," i.e. the omni-channel capability needed to identify, leverage, and measure micro-moments. In other words, these organizations are not effectively set-up to shape the decisions and preferences of their consumers in these moments.
3. **Omni-channel marketing is more profitable.** Brands that participate in micro-moment marketing and omni-channel mapping are 65% more likely to report "very profitable" ROI in both mobile and overall marketing, according to Forrester.

All told, micro-moment marketing is still in its infancy, the research found. "Our own strategy is the No. 1 thing inhibiting us from doing more with mobile," remarked one ecommerce manager. "It's frustrating because we're not looking at the whole ecosystem, and our strategy is not customer-driven."

Wherever you land on the mico-moment curve, there are shining examples of success. Leading retailers are already creating seamless omni-channel experiences to reach consumers at any moment on any device. Here are five in particular.

TARGET: Boosting loyalty with mobile-first measurement

[embed video]

- After learning that 98% of their guests shop digital and 75% start on mobile, Target dramatically increased their spending with Google Shopping Ads, converting nearly one-third of those who clicked on a search ad into store visitors, according to Google store data.
- Disbanded their mobile organization and created a mobile-first Target.com organization; reorganizing teams and joint incentives to ensure that merchandising was prioritized based on where the customer was shopping. Digital teams helping define the merchandise in-store.
- Discovered that omni-channel shoppers spend 3x more than those who shop in-store only.

REBECCA MINKOFF: Empowering customers with "connected" stores

[embed video]

- After launching "Connected" stores, which incorporate online shopping into in-store dressing rooms such as "buy later" links, Rebecca Minkoff increased ready-to-wear sales by 7x in just five months.
- Created an omni-commission structure to compensate and incentivize employees for helping customers in their preferred channel, leading to the discovery that 20% of their search sales come from multiple devices.
- Used omni-channel data to inform merchandising decisions and understand where to stock products. "We learned that there's a reason why so many millennials like to shop online," remarked one manager. "They want to control the shopping experience," using their mobile device more than 150 times per day.

MACY'S: United we stand, mobile more valuable

[embed video]

- Learned that consumers who shop across channels are 8x more valuable than those who only engage online.
- Increased mobile investment on Google by 175% in Q4 2014 and launched "in-store pickup," leading to a 2x increase (over 117%) in mobile revenue.

- Increased sales and improved natural margin after merging online and in-store merchandising and marketing departments as one in purpose (i.e. engaging with the customer on her terms, timing, and channel preferences).

ARGOS: Helping customers "get in and out" in 60 seconds

[embed video]

- After learning that 25% of their business happens on mobile, Argo launched [Local Inventory Ads] to help customers find nearby stock.
- Created Fast Track where someone can be in and out of the store in less than 60s, an experience that appeals to the 46% of their customers start online and 90% who end up in-store.
- Grew mobile sales by 38% to account for 25% of total store sales (*Source: Argos earnings report 2014 - Internet Retailing*)

MEDIA SATURN: Creating a digital opportunity map to grow overall sales

[embed video]

- After learning that ⅔ of sales were influenced by digital, Media Saturn increased their Google investment by 40% annually, resulting in a 25% increase in online sales.
- Worked with Google to create opportunity map and digital strategy to boost overall sales by 5% in the last six months
- Adopted "Local Inventory Ads" in 2012 to better avail supply during consumer micro-moments.

Those are just a few examples of retailers finding success in the nascent micro-moment world. Want to find similar success but don't know where to start? Forrester outlined five key recommendations for the 98% who still haven't embraced micro-moment marketing.

1. **Get executive buy-in and unify your channels.** Like Target, Macy's, and Rebecca Minkoff demonstrated, create a cross-functional steering committee to allocate and influence budgets and resources to support moments shopping. Align IT, marketing, product, finance, and CIO with CMO teams to enrich customer experiences.
2. **Identify your customer moments, experiences, and contexts.** This can be done through customer journey mapping — understand how customers interact with your brand at each touchpoint and identify experiences to optimize. Leverage ethnographic studies to understand the world of your customers outside of your brand, and put your brand in that context. Lastly, collect data from all interactions to continuously learn from your customers and their precise moments of intent.
3. **Invest in mobile, location-based, and omni-measurement technologies.** Delivering on moments requires a whole new set of capabilities, Forrester found,

especially the integration of mobile experiences, apps, websites, and third-party data into your back-end system. Moreover, consider using contextual data such as time, location, and weather to create purchase incentives and foster mobile engagement (e.g. ads for a taxi service to someone looking up public transit directions, or a coupon for tissues to someone researching cold medicine in a pharmacy).

4. **Use omni-measurement to learn from your mistakes.** Micro-moment measurement means you have to combine web, mobile, and in-store analytics into one (what we call omni-measurement) while taking into consideration the contextual data cited above. For more information…
5. **Lean on partners for expertise.** Whether you choose Google tools or not, most marketers need outside help. “The data in this study clearly indicates that a vast majority of firms will need to consult trusted partners to call themselves ‘moments-ready,’” concluded Forrester. “It would be incredibly unwise for marketers to attempt to spearhead mobile initiatives by themselves.”

For more information, [insert bottom line call to action/URL].

What business can learn from the world's biggest sporting scandal

In 2015, the U.S. Department of Justice indicted dozens of global soccer officials on charges of rampant bribery, money laundering, and widespread corruption. As the "FIFA fallout" continues, here's what organizations can do to keep themselves honest, in good standing with the law, and free from corporate fraud.

By Blake Snow

The month before the 2014 World Cup was set to kick-off in Brazil, a Los Angeles journalist by the name of Ken Bensinger received a juicy tip from a colleague. According to the tipster, a top U.S. soccer official by the name of Chuck Blazer had defrauded the sport of more than $20 million dollars. Not only did the official deal in the wholesale bribery, but he apportioned 10% of almost every single dollar that came in—even hot dog sales, even on charity games.

Bensinger did some digging, confirmed the rumors, and published his wild, investigative story for Buzzfeed News. The story went viral, and quickly uncovered a rabbit hole of obscene corruption that reached nearly every region of the global sport, from the bottom to the top. Although international FIFA officials from were always suspected of rampant fraud, Bensinger's story was the first to reveal that the culture of crime had undoubtedly reached U.S. shores.

A year later, with the help of a cooperating Blazer, the U.S. Department of Justice indicted the first of dozens of FIFA officials on organized crime charges of racketeering, bribery, money laundering, and fraud. That seismic event lead to Bensinger's groundbreaking and riveting new book, *Red Card*, published earlier this summer.

I recently spoke to Bensiger about the fallout and what companies can learn from largest sporting scandal in world history. And although few, if any, legitimate businesses operate as organized crime syndicates like FIFA often did, Bensinger was quick to diffuse the proximity.

"It was organized crime, but the corruption case also involved several legitimate businesses," Bensinger says. "Sports marketers, big broadcasters, and sponsors such as Coca-Cola, Sony, and McDonald's, the latter two which even canceled their contracts with FIFA as a result."

Lessons Learned

Although the case continues, Bensinger says he's learned several lessons after investigating and reporting on the scandal for over two years. The first may seem like a no-brainer, but it bears repeating.

1. Cleaner organizations make more money. For both FIFA and its bribing television rights resellers, each traded higher revenues in exchange for personal greed. For the former, they earned far below market value after accepting bribes and agreeing to non-competing contracts. For the latter, "many had literally bribed themselves into insolvency," Bensinger says. In opposite terms, a sinking tide lowers all boats.

2. Question positive results before accepting them. In one example, the board of directors in the North America and Caribbean region of FIFA simply signed off on the cooked and bribe-filled books every year in spite of rising revenue. They didn't ask questions, blindly accepted the results, and weren't willing to take a hard look at how the numbers were improving as well as they were, Bensinger says. "In short, they allowed the cozy and friendly fraternity to get the best of them, despite their advanced degrees in accounting, management, and economics."

3. Changing a compromised culture is hard. As the U.S. government found out after first attempting to bring down the mob, "No sooner did you bust one generation of crooks than you were chasing after the ones that came up behind them," says Bensinger. In that regard, FIFA was no different. The underlings wanted their cut of the bribes once the house-cleaning of the top happened. Greed begets greed. Bad behavior begets bad behavior. Unlike the mob, however,

the goal of the FIFA case (or any corrupt business, for that matter), isn't to terminate the organization. "You have to find a way to kill the cancer without killing the patient," Bensinger says. "You have to be surgical in your scope and with your cuts."

4. The issue is complicated for underprivileged societies. Corruption, bribery, and underhanded business dealings are more prevalent in societies with failed states or a lack of trust for institutions, argues Bensinger. "In those cases, people often ask what's best for them as individuals rather than conforming to what's best for the greater good of society," he says. Once the "get mine" mentality takes root, it's hard to make a clean break.

But it can be done.

Prevention Strategies

The average company loses 5% of annual revenue to fraud, reports [The Association of Certified Fraud Examiners]. Although the majority of fraud happens in small businesses with fewer than 100 employees, total estimated losses in America alone are well over $1 trillion annually, so there's a big economic incentive to root out corporate fraud.

How can this be done? There are several proven ways, explains Art Vandelay, senior director of oversight at PwC. Here's a rundown of each to help organizations prevent, avoid, and ultimately clean up the occurrence of white collar crime.

1. Know where the temptation lies. According to The Association of Certified Fraud Examiners, the majority of fraud takes place in banking, government, and manufacturing institutions. The most common bad behaviors include asset misappropriation, corruption schemes, and financial misstatements, and the most common personnel involved include accounting, operations, sales, and upper management professionals. While other industries and departments are in no way immune to corruptions, there's nothing wrong about focusing on the usual suspects, Vandelay says.

2. Empower your employees. Give your board of directors oversight and your compliance officers teeth. Train managers and underlings to recognize behavioral warning signs. Moreover, create an anonymous and well publicized reporting (or tip) system for employees, vendors, and customers. "Rather than turning a blind eye or having no outlet to report superior abuses, interested organizations must adopt an easy-to-use tip system," Vandelay says. Obviously this could be abused in isolated instances—the goal is to catch a trend of misbehaviors so you can nip it in the bud before it becomes an even bigger problem. "All in all, you must encourage, support, and even incentivize a culture of honesty," Vandelay says.

3. Adopt internal controls to safeguard company assets. That always includes the reconciliation of bank accounts every month, rather than quarterly, annually, or heaven forbid never. It also includes the use of outside and independent auditors and fraud examiners on an annual or

suspected basis, and the checks and balances or segregation of duties so no one employee has too much control or power over a single area or large budget (aka "ethics" or "accountability buddies"). Furthemore, it might also include data monitoring activities to alert compliance officers and oversight committees to suspect anomalies.

4. Teach federal sentencing guidelines instead of ethics. People make better decisions when they clearly understand the consequences, says Vandelay. In fact, one seasoned judge reported that the fear of prison "has a mighty major deterrent effect" on white collar crimes. But since many white collar executives feel above the law, the prison consequence and ramifications of corporate fraud must be clearly communicated and understood rather than simply implied as is often the case at many companies today.

The Final Word

As with all areas of life and business, failing to plan is planning to fail. The same is true for preventing, avoiding, and/or changing a culture of corporate fraud.

Surprisingly (or perhaps unsurprisingly for any who have closely followed the organization), FIFA recently and confusingly chose to strike the word "corruption" from their new code of ethics and made it even harder for future whistleblowers to snitch on their colleagues, Bensiger reports. "They've taken some positive steps but also some negative ones in terms of embracing more transparency."

And that's really what it all boils down to—transparency. In order to make more money or impact more people as a clean organization, you must commit to letting the light shine in the sometime darks or obscure corners of your organization.

The good news: knowing is half the battle. Now you know. ●

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How Demand Centers Realize True Account-Based Marketing

By Robert Archacki, Phillip Andersen, Neri Conti, and Basir Mustaghni

Traditional business-to-business (B2B) marketing is no longer working. At best, it's flat. At worst, it's in decline, according to mounting evidence from several leading researchers.

Which is why an increasing number of enterprise-sized companies are turning to Account-Based Marketing (ABM), a trendy but impressively effective approach pioneered by large computer companies over the last decade. In short, ABM attempts to coordinate both sales and marketing around "accounts" instead of individual leads or persons within an organization.

That said, ABM is harder to do than most people first realized. For one thing, early practitioners are still too focused on leads over accounts. Secondly, ABM acquires significantly more alignment between sales and marketing (including goals, operations, and data) to be successful. In that way, ABM's current iteration is failing almost as badly as traditional demand generation marketing. It will never realize its full potential until sales and marketing (S&M) are truly and finally aligned. Because of this, many early adopters are struggling to find their traction.

The good news is there's lots to learn by looking at select companies that have mastered ABM. In this report we'll examine the current state of Account-Based Marketing, the importance of S&M alignment, and what we can learn from successful ABM leaders. Furthermore we'll identify the key ingredients needed to move up the maturity curve and how demand centers can play an important role.

Let's begin.

Why Account-Based Marketing Matters

Although well-intentioned, Account-Based Marketing (ABM) was poorly named. It should have been called "Account-Based *Sales* and Marketing" because the approach requires equal collaboration between both departments in order to succeed. As ABM expert Jeff Sands eloquently put it, "ABM is a strategic partnership between marketing and sales. If it's only sponsored by marketing, it becomes a campaign."

Secondly, Account-Based Marketing is part of a larger trend of moving away from contacting individual leads to contacting an entire team, company, or "account" of leads that are increasingly working together to decide who to buy from. According to Engagio, the number of people who now influence the typical enterprise purchase has nearly doubled over the last decade, up from 10 just 10 years ago to 17 today. Hence the focus on "accounts" or as one observer noted, "It's called business-to-business sales, not business-to-lead sales."

In its purest form, ABM requires sales and marketing to work together when coordinating all customer-facing and ongoing correspondence. They work together to identify, build, and maintain account relationships. They jointly fish with a spear now for the single biggest opportunity, whereas before they may have “fished” with two separate nets in search of several isolated leads.

At its best, Account-Based Marketing acts as a forcing function to help align sales and marketing around accounts. Not only because it’s the logical thing for large companies to do, but because it produces measurable results. For instance, 97 percent of marketers say they’ve experienced “a somewhat higher” or “significantly higher” return on investment after adopting ABM and aligning their sales and marketing efforts while targeting singular accounts instead of several leads, according to research from the Altera Group.

In fact, “ABM delivers the highest return on investment of any B2B marketing strategy or tactic,” a recent ITSMA study found. And yet only half of B2B organizations report having some kind of ABM strategy in place, according to Aberdeen Research. Of the ones that do, two-thirds report that marketing and sales still aren’t aligned.

Which is why sales and marketing alignment is so crucial to account-based marketing. While technology is just an enabler, it does not guarantee ABM success. S&M alignment, on the other hand, actually does.

Why Unified Sales and Marketing is Paramount

[insert sales and marketing alignment graphic]

The B2B buying journey almost always begins with online research now, as opposed to speaking with a company representative first. In fact, evidence suggests that B2B buyers spend more than two thirds of their due diligence time researching online, eliminating vendors before they even engage. In that way, those who aren’t providing personalized online messaging and touch points are losing opportunities they might not even be aware of.

That’s just one of the ways the modern marketing process has dramatically changed. The other, arguably more important way, is the dependence of both sales and marketing to jointly identify, serve, and eventually close opportunities under a single ABM banner. With so many ABM practitioners admittedly struggling with sales and marketing alignment, however, what does it take to achieve successful collaboration between the two departments?

From our research and interviews, they are as follows:

1. **Both sales and marketing need a voice at the table.** If only one is present or onboard, your ABM will likely fail. Period.
2. **Organizational change is more important than technology.** Again, ABM is not a technology problem, it’s a cultural one that requires significant process change in how

accounts (formerly leads) are not only identified, but engaged and converted. Tech is an enabler, not the answer.

3. **ABM is less gut-, more data-based.** To identify opportunities and buying intent, you'll need access to data regarding addressable markets, personnel, the decision-making processes, specific use cases, and personalization plans.

To get an idea of what this change might look like, consider the increasing use of “mini” chief marketing officers designated on single accounts. Similarly, many of the companies we spoke to conduct sales and marketing meetings on a weekly basis now, as opposed to quarterly. This alone is one of the biggest challenges facing ABM proponents today, specifically moving away from the traditional relationship between sales and marketing and into a new, more cohesive, if not unified one.

That will likely include changes to your organizational chart, frequency and attendance of meetings, and the establishment of virtual teams. It might also include dramatic transformational change.

For instance, one client we recently consulted with was having difficulty aligning its sales and marketing. Its revenue suffered as a result. After bringing in a new CMO, it was decided that senior sales executives would attend all future marketing meetings and that the CMO would attend all future sales meeting. Marketing was there to serve sales and vice versa, according to official company language. Consequently, this new theme and policy change of one team with one common goal allowed the company to grow revenues once more.

In that way, ABM is a powerful mechanism to not only increase revenue, but hopefully drive true alignment between sales and marketing once and for all. In short, successful alignment almost always includes the following:

- Regular communication between sales and marketing to review performance, goals, and opportunities.
- An established ABM office or Demand Center for all sales and marketing operations.
- Clarity on target markets, account selection, and customer problems.
- ABM platforms to manage predictive data, personalized content, and ongoing efforts.
- Change management resources to support all of the above.

In our experience, Demand Centers are the best way to accomplish much of the above. They are not a silver bullet, but they’re a proven way of overcoming the most common challenges and shortcomings associated with Account-Based Marketing. When done right, they help govern the new sales and marketing interface, manage the technical and data infrastructure, and measure performance. Often times, the ABM lead sits and directs operations from within the demand center.

What We Can Learn From ABM Leaders

Although it can be difficult to achieve, there are several ABM leaders who are doing well. After interviewing two dozen marketing executives from various industries and companies, here is what we learned about ABM performance gains, based on a range of typical impacts from the companies we spoke to:

- Marketing-influenced new new revenue increased by more than double to over 50 percent.
- Website traffic from target accounts increased by over 30 percent.
- Conversion rates (lead capture to "closed") increased by 3-4x.
- Win rates (percent of opportunities closed) improved by 25-50 percent.
- Average deal values increased by 20 percent.

Obviously, actual ABM benefits will vary and depend on the specific opportunity for a company. But according to the companies we spoke to, there is noticeable excitement and enthusiasm for early results.

For example, after successfully combining its sales and marketing goals recently, a $20 billion IT services company identified the top 20 deals they wanted to pursue. The strategy worked. Not only did the technology provider report higher "win" rates after adopting ABM, the exit sales interviews resulted in a 99 percent approval rating for the value that the ABM efforts had created for buyer.

Similarly, one of the world's top 10 software manufacturers recently increased its win rate by 65 percent after adopting ABM. With the help of a newly formed Demand Center, the B2B software giant scaled their low-touch digital campaigns to drive cloud leads more efficiently through free trials. In doing so, they were better able to understand the account's use, needs, and behaviors during trial periods, which ultimately allowed them to significantly improve post-sale customer success and platform loyalty.

In another case, one of the world's largest database companies tripled its conversion rate after running its combined ABM campaigns through a centralized Demand Center used to standardized its goals and opportunities. With the help of its homegrown marketing automation software, the once "enterprise only" company began targeting and closing mid-sized companies to grow their market share. In addition to the tripled conversions, the company grew its annual revenues by 20 percent on the same sales and marketing budget. In other words, by combining sales and marketing into one opportunity center, the company was able to do more under the same budgetary constraints.

Several other companies we spoke to cited early successes with ABM as well. In an effort to win over a single "consuming financing" account at one of the world's largest automakers, one even created a custom video campaign showing how their own marketing software could help the automaker close more financing deals.

That said, you don't need to wait to implement major tech to get going. In fact, many of the companies we spoke to start small on joint opportunity accounts in just one territory, with one product, or with only a small account. In other words, Account-Based Marketing doesn't require a significant investment in new technology to begin. Alignment between sales and marketing is the biggest prerequisite.

Of course, that requires its own set of change management challenges, including both process and cultural changes. This is especially true when scaling ABM or introducing a jointly empowered Demand Center, both of which pose major implications for the entire S&M model, namely organization, technology use, data sharing, content messaging, roles, and employee skills. And while that too may be easier said than done, it is possible as we'll show below.

Key Ingredients Needed to Mature

[insert maturity curve graphic]

ABM is harder to achieve than it looks; that much we know. The good news is several reputable practitioners have already found tremendous success with the promising strategy, according to our interviews. Not only are these companies recording impressive returns, they're reducing both their marketing and sales waste since resources are more efficiently pooled and optimized towards targeted accounts now.

So what does it take to succeed with ABM today? For this report, BCG recently interviewed over 20 senior technology and industrial marketing executives for important answers on best-practices, as well as stand-out examples that interviewees felt were doing an excellent job. Given ABM's requirement to further coordinate sales and marketing efforts, BCG also reviewed its previous work with transformation engagements.

What we found was this: every leader used the following five ingredients when cooking with Account-Based Marketing:

1. **Identify high-value accounts.** ABM practitioners aren't necessarily after the "biggest fish." Instead, combined sales and marketing personnel target the biggest *opportunity*. This is done by factoring revenue potential as well as strategic influence in the market, mutual goals, shared ROI, likelihood for repeat business, and the potential for higher than average profit margins. That said, data driven approaches to selecting accounts with predictive modeling are more likely to be affective than simply letting the sales team select accounts.
2. **Know internal structure and players.** If an average of up to 17 different people influence B2B purchases now (as cited above), then you'll need to identify how your target accounts are structured, how decisions are made, and who the decision makers and influencers are. This will vary across verticals, products, and target company size. But generally speaking in B2B, there will be "committee based buying." Thus, S&M organizations will need explicit account strategies.
3. **Generate demand with personalized messaging.** In order to personalize engagement at the account or segment level and drive sales, general-interest content probably won't work for a targeted ABM campaign. Rather, you need to create clear and personalized content that speaks to the individual accounts needs and challenges with a consistent message. For example, that might be a custom video of how they might use your product or service, or a best-practice case study that's entirely unique to them.

4. **Use omnichannel outreach.** You might develop a great asset for a targeted account, but if you send it through the wrong channels, it won't have an impact. Along with mapping structure and players, you'll need to know how your account prefers to be engaged, whether over email, text, social media, web demo, in person, over lunch, or through a mailed gift just to name a few. Before sending, consider which channels will be more effective for specific roles or industries and then adjust your omnichannel priority accordingly.
5. **Adapt with analytics.** Since it's still a "new frontier" for many, the best ABM users are always measuring and learning from their previous and ongoing "spearfishing" efforts. Which accounts converted, which didn't, and why. As with all things ABM, however, both sales and marketing are participating in the measurements to ensure that both sides are helping to improve the service. They use predictive modeling for prioritizing accounts, personalized engagement for scoring opportunities, and customer insight reports generated from past behaviors.

While it will undoubtedly require more than the above to achieve successful Account-Based Marketing—especially when scaling from a few dozen management accounts to hundreds—the leading research mirrors our own: the above five ingredients are all "must-have." To ensure alignment, collaboration, and coordination, you must deliberately manage the sales and marketing interface. In our view, demand centers are not only the best way to achieve that alignment, but also the best way to eventually scale your technology, automation, and digital engagement to serve an even greater number of accounts.

Scaling For The Future

To better compete for today's accounts, an increasing number of leading ABM companies and executives are turning to Demand Centers. As a centralized authority used to espouse, support, and manage the transition to Account-Based Marketing, these centers are more successful than any other previous attempt at unifying sales with marketing.

In BCG's experience, Demand Centers can improve media spend by 10-20 percent, reduce cycle times by 15 percent, increase inbound leads by 25 percent, and reduce the cost of qualifying leads by 30 percent. Furthermore, they convert up to three times more leads and result in noticeably higher transaction fees when compared to traditional collaboration (or lack thereof) between sales and marketing.

Obviously change is hard. Up to 75 percent of all change management efforts fail, according to a recent *Economist* study. Which is why change management and culture transformation is arguably the most important thing you can do to set yourself up for a successful ABM program. Whether you follow our prescription of Demand Centers or not, your greatest challenge to implementing ABM will be the make-or-break marriage of sales and marketing when deciding on which accounts to target, engage, and convert based on shared data.

In our view, Account-Based Marketing is now accessible to all big companies, not just early-adopting and prevouly-leading tech ones. Not only can it be used for increased selling to other enterprise customers, ABM can also help you target mid-market opportunities as well. In short, ABM is a sales and marketing best practice that will impact and revolutionize all B2B industries.

When it comes to bridging the divide between sales and marketing, implementing a Demand Center, merging your tech and data infrastructure, orchestrating your outreach efforts, and scaling your ABM efforts from dozens to hundreds of accounts, the time is now. Failure to do so will only give your competition the eventual leg up. ●

There and back again: How FSI's well-being leader regained his health.

Well-being means different things to different people.

For Principal, Hanif Sidi, well-being used to be a huge focus—something he did everyday with friends and family. "When I started at the firm 20 years ago, I worked out every day, sometimes twice a day," he says. "I had a very active lifestyle that included outdoor activities such as fishing, hiking, and camping with friends, along with relaxing vacations and cooking with family."

At some point, Hanif started de-prioritizing well-being activities as he increased his focus on work. "As an eager consultant, I was highly motivated to deliver the best work possible at our clients, take on additional firm responsibilities, and ensure the growth of our practice and people without any consideration of the personal impact" he recounts. "As I progressed, I found myself de-prioritizing well-being activities, despite the firm's growing focus on it.

"I simply did not think it was that important to invest in personal well-being or recognize that well-being was essential to my success at the firm and at home."

Declining Personal Well-being

In the intervening years, the costs became clear. "I paid the price and found myself inactive, lethargic, and medicated for hypertension. I slept poorly and had little energy to do much on the weekends with my family. In fact, I spent more time taking care of our car than I did taking care of myself."

Last year everything changed when something unexpected happened - a close family member of one of Hanif's colleagues suddenly passed away. "He was a healthy, full-of-life father to a daughter about the same age as my own. This struck a chord, and I decided that I had to change."

That change started by taking stock of who he wanted to become and looking past the person staring back at him in the mirror. "I did this by prioritizing my personal well-being and making it an integral part of how I live on a daily basis. I started by making the right dietary choices, getting quality sleep, and working out. But most importantly, I re-learned how to relax and spend time with loved ones doing the little things again—including cooking with my daughter, swimming with the family, playing Scrabble ('Lame' according to his 9yr old daughter), reading, and fishing."

That sustained effort resulted in a marked improvement to Hanif's own well-being. "Through a complete lifestyle change, I have my health in check. I have largely shed the stress, some weight, and the medication."

Improving Well-Being

As for the specific Deloitte benefits used to improve his health over the last year, "The flexibility for folks who want to spend more time at home and less time traveling was the main one," Hanif says. "Deloitte helps you do that."

On top of that, Hanif and his team are working to emphasize that well-being is at the heart of how Deloitte will do business in FSI by sharing actionable insight to project leaders and leveraging well-being assets. "We have 20 plus motivated and passionate practitioners working on this, leveraging company-wide well-being assets, and sharing account-level best practices to promote better physical and mental health."

On top of that, Hanif says his clients have taken an enthusiastic interest in his new role as the well-being leader for the FSI practice and how they might learn from Deloitte's experiences. "When I told my clients about becoming a well-being champion, many of them asked if it would be possible to access our teachings as it's something their company's also struggle with. They might not travel as much as a Deloitte consultant, but they can empathize with similar well-being concerns of their workforce."

Helping Others

In addition to the above new programs, Hanif says the most important thing he can do is to share his story and help others to find their own path.

"I am highly supportive of my project teams to travel less, disconnect in the evenings and on weekends, and I support their personal focus on mental and physical well-being," he says. "Over the course of my career, there have been numerous options available to me to improve my well-being while still being able to successfully meet client needs. My hope as the Well-Being Leader is to help our FSI people find their own path to empowered well-being."

"I have learned that well-being is a lifelong journey and there are many things I could still do differently to make small gains each week, both physical and emotional. My goal is to make continuous improvement an integral part to not only FSI Well-Being, but our entire culture."●

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Inclusion as the competitive advantage: The case for women in supply chain

For the future of supply chain, increasing the number of female supply chain professionals is not only a proven growth strategy, it's a competitive advantage. Here's why and how supply chain leaders can bridge the skills shortage with more women, upgrade hiring and retention, and ultimately unleash women's still untapped potential.

The marketplace is becoming more diverse than ever before. But many industries are still playing catch up when it comes to attracting a workforce that is more reflective of their customers and more capable of meeting the technical, operational, and cultural challenges in the marketplace. This is exemplified by lack of women in supply chain. For example, according to a recent Deloitte study, women account for just 29 percent of the total manufacturing workforce, despite accounting for almost half (47 percent) of the total US labor force as of last year. Similarly, women account for just 37% of the total supply chain workforce and just 14% of supply chain leadership positions, according to a recent Gartner report.

For supply chain leaders interested in competing in future industrial revolutions and seizing the next competitive advantage, a nearly 20 percent gap between men and women presents a sizable opportunity. But it will take a lot more than just compliance with decades-old diversity mandates to successfully attract, develop, retain, and leverage this powerful talent pool. Addressing this challenge will require companies to execute broad-based inclusion efforts that will draw females to be supply chain professionals and create the environment where they can flourish.

In fact, our research shows that a significant majority of companies have the stated intention to shift from diversity as a program to inclusion as a business strategy. But nearly one-third of companies in the same global survey say they are unprepared to do so, while only 19 percent claim to be fully ready. In other words, while all those surveyed admitted to promoting diversity, most companies still don't have a highly inclusive workplace and/or fail to realize the full benefits of inclusion.

Why does this matter? It matters because inclusive organizations are twice as likely to meet or even exceed their financial targets, according to eye-opening research from Catalyst. Moreover, those same organizations are six times more likely to innovate, eight times more likely to improve business outcomes, and 35 percent more likely to outperform their industry peers, the same study found. The message is clear, inclusion is a critical ingredient for business success and essential to building the workforce of the future.

In this special report on the lack of women in supply chain, we'll examine the (1) key trends driving the need for more women in supply chain; (2) how to assess your company's inclusion readiness, and ultimately (3) how to hire and retain more women in supply chain.

Key trends driving the need for more women

As emerging technologies such as self-driving cars, digital voice assistants, and robotic process automation redefine tasks, many traditional jobs are being combined. For example, previously "siloed" activities such as logistics planning, coordination, and freight payment might be executed by one role or individual in the future, with the help of blockchain and the Internet of Things (IoT). To execute this as an integrated process, traditionally segregated logistics & distribution roles, such as logistics coordinators and billing specialists, might be consolidated — requiring individuals in the new roles to have knowledge of additional supply chain and non-supply chain processes. In this way, individual workers would need knowledge of the organization spanning the end-to-end value chain.

"You need a blend of talent," says Caryn Seidman-Becker, CEO of CLEAR. "You need those folks who can dream a product, those who can build the product, and the ones who can execute product delivery. Sometimes the best coders are poets. It's really balanced, and we need a lot of each."

But the supply chain industry is currently undergoing a significant skills shortage, not to mention several rapidly evolving roles that are becoming increasingly harder to fill, according to a recent Deloitte report. Although women represent 50 percent of most workforces, according to Gartner, there are 20 percent fewer women working in supply chain when compared to other industries. Not only is recruiting more female candidates the right thing to do, it's the obvious solution to overcoming the skills shortage and driving supply chain forward. For instance, a recent Forbes report found that women are better multi-taskers, collaborators, and team buildings when compared to their counterparts.

The good news is that organizations who cater more to females can actually end up attracting better talent as a whole, male or otherwise. This is especially true of up-and-coming Millennials and Generation Z workers. In fact, this growing and sometimes dominant workforce duo consider diversity and inclusion table stakes when choosing an employer, according to a recent Deloitte survey of millennials. What's more, retention and loyalty among these working groups is enhanced when businesses and their senior management teams are categorically diverse, the same report found.

How to assess your company's inclusion readiness

Based on our research, many organizations understand the importance of increasing the number of women in supply chain. But a similar number are unsure of their own workforce demographics or how to go about attracting more women workers. Knowing where your organization lies on the "Deloitte Diversity and Inclusion Maturity Model" is a helpful first step in creating an actionable strategy for long-term growth (see below figure).

To help you identify your level of inclusion maturity, your executive team, department heads, and human resource leaders must collectively and honestly answer the below questions:

1. Is your organization focused on compliance or does it consider diversity and inclusion as an integral part of your growth strategy? (i.e. Are you trying to stay out of trouble or embracing diversity as a competitive advantage?)
2. Are you losing high-performing women or limiting your reach of recruiting them in supply chain?
3. Does your organization perform ad hoc initiatives for building an inclusive culture or does it develop C-suite policies to create a company-wide culture of talent inclusion?

Regardless of where you currently land on the above maturity scale, future performance will largely depend upon your organization's ongoing ability to attract, hire, develop, retain, and empower a diverse set of new hires. With that in mind, here are some important points to consider when it comes to inclusive recruitment and retention:

- **Hiring skill sets.** As linear supply chains morph into end-to-end digitally enabled supply networks enabled by AI, machine learning, and cloud solutions, new roles will emerge that require a broader set of skills, cognitive abilities, and interpersonal characteristics. To that end, it's important to focus your hiring practices on the greatest opportunity areas. Per our previous guidance on the subject, your organization should prioritize women in technology-infused postsecondary graduates, STEM graduates, and more credentialed workers with skill certifications.
- **Hiring bias.** Because of human nature, bias can negatively influence recruiting. Hence, training recruitment teams on how to eliminate bias is critical. For example, some organizations are eliminating names on resumes to avoid any unintended gender or ethnicity bias, according to one report. Others are using objective analytics to identify more qualified candidates and creating job descriptions that appeal to both genders and all races.
- **Retention awareness.** In a recent Glassdoor survey, 67 percent of job seekers said that a diverse workforce is an important factor when evaluating companies, accepting job offers, and staying aboard. Therefore, you'll be required to educate the market on your commitment and progress to not only becoming a more inclusive organization, but one that ultimately promotes and sponsors women from within, especially as they advance in their careers along the path towards leadership. In other words, positive buzz will follow for companies who do this effectively.

To win in the market and create a culture of inclusion, we must think more holistically about how we recruit, develop, identify, and promote female talent.

How to hire and retain more women in supply chain

Historically, supply chain roles evolved around functional expertise that focused on optimizing segments of the supply chain using periodic analytics. The future will be highly dependent on digital supply networks with connected customers, suppliers, and functions, new roles will emerge that require a more complex and broader knowledge of synchronized planning, warehousing, and autonomous logistics.

The workforce of the future demands leaders who inspire confidence and recognize an individual's unique value. In our research and experience, the most mature and "integrated" institutions on the inclusive scale often do the following five things:

1. Create a top-level inclusive strategy and point of focus for the chief executive, chief operations, and chief employment officers.
2. Tie executive compensation to inclusion goals. For example, 10 percent of executive compensation at P&G is linked to meeting diversity goals during individual performance reviews.
3. Create behavioral standards, diversity metrics, and hold leadership accountable for results with proper incentives.
4. Assign a top executive to be responsible for leading and sponsoring a modern diversity and inclusion program.
5. Create employee networks, inclusion champions, employee resource groups, and other support groups to bring people together on the issue and make them feel heard.

So, what can you do today to move the needle on modernizing your inclusion approach and ultimately welcoming more women into the supply chain fold? Deloitte recommends the following:

1) **Assess your stage in the maturity model.** Which areas are you lagging or leading from in terms of ownership, workforce, incentives, and support systems? How can you attract and retain more women in supply chain?
2) **Refine your talent pipeline to match the changing skill sets.** Once you understand your place on the maturity scale, consider ways to foster and identify talent for the future. That could include sponsorship with female STEM programs or partnering with existing organizations such as ChickTech or MakerGirl.
3) **Integrate your planning.** Not only can AI-driving processes improve both your front-end and back-end operations with more accurate demand data, it can be used to orchestrate both your supply chain talent and inclusion gaps.
4) **Empower your organization** through team, talent, structure, and policies built on cognitive diversity. Understand what actions and metrics will drive organizational alignment across all levels on inclusive culture.

In a recent Deloitte survey, 86 percent of respondents said their organizations were doing everything they could to create a workforce for Industry 4.0. This year, as more respondents recognized the growing skills gap, only half say their organizations are doing everything they can to fill the gap and develop the talent needed to compete for the future. In both our own view and the mounting evidence cited herein, courting, training, and promoting more women in supply chain is the answer.

Obviously, inclusion won't happen overnight. But progress can be made, especially after an honest self-assessment about your organization's current maturity level. From there, it's all about a focus on pipeline refinement and enacting policies that help your inclusion and profitability targets, which the above evidence shows are inextricably linked.

All told, inclusion is a massive opportunity for the supply chain profession. And the strategy of "attracting and retaining more women" is as clear as it is possible. ●

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4 Key Steps To Guide Your Digital Transformation

Written by Blake Snow for byline attribution to KPMG expert or unbylined publication

The world has changed dramatically since the smartphone launched a decade ago. Whereas before in the web era digital was part-time and largely tied to the office or cumbersome personal computer. Today, digital is full-time and remains by our side (or in our pocket) at almost every turn.

To succeed in this brave new world, businesses must not only provide superior experiences for consumers, customers, and employees—they must deliver on their promises in a faster and more accommodating way.

What's the best way to get there? Pulling from our rich history of over three decades of executive leadership and board room advice to some of the biggest brands in the world, KPMG has identified four key steps towards successful digitization.

1. Understand industry-specific opportunities

Digital disruption impacts different industries in a different ways. In healthcare, for example, physicians are turning to remote doctor visits by video (aka telemedicine). In industrial equipment, meanwhile, John Deere has installed software and data-collecting sensors on its iconic machines to help farmers yield higher demand in a consolidated farming market. In other words, one size does not fit all and some digital technologies work better than others in different scenarios.

2. Strategize from the outside–in

In our experience, digital transformation starts with an increasingly demanding and informed customer and works inwards to ensure that every part of the organization is built around delivering a delightful experience. In order to meet these expectations, companies must not only avail themselves to the same consumer technologies, but go a step further to capture, analyze, and respond to customer behavior before, during, and after it happens. If the customer is always right, they must remain the digital digital focus as you transform from the outside–in.

3. Connect front, middle, and back offices

To become a fully realized digital enterprise, companies must address inward-facing platforms and applications as much as customer-facing ones. Taking an enterprise-wide approach facilitates what IDC describes as one of the foremost requirements of successful digital transformation. That usually means reducing friction and improving connectivity among middle-office functions (such as supply chains) and implementing digital labor and intelligent systems in the back office (most likely with cloud technology) as much as it does fancy front-office applications designed for consumers.

4. Explain why with change leadership

By its nature, digital transformation blurs the boundaries between teams, functions, and even operating models. To achieve the required buy-in, leadership must inform and integrate a robust and believable cultural change program. They must also prioritize efforts carefully and celebrate "quick wins." Only then will digital transformation achieve the unified vision, company-wide engagement, and motivated stakeholders (both internal and external) needed to succeed.

For more information, please read KPMG's full report, Destination (Un)Known, or contact Rick Wright, our digital transformation leader, with questions about an applicable advisory partnership: (617)-988-1163 or richardwright@kpmg.com

Digital is no longer a thing, it's just how the world works now

By Richard Wright (re-written by Blake Snow on behalf of Leslie Schiffer)

I have something I'd like to get off my chest and hope you feel the same. It is this: "digital" is not a thing. It is simply a word that describes how the world operates today.

For instance, what used to be done offline is rapidly moving online. Shopping. Socializing. Streaming entertainment. Software as a service. Everything besides agriculture, construction, transportation, and manufacturing really (and even those are increasingly reliant on digital). Consequently, the boundary between physical and virtual has been confusingly blurred, if not entirely removed.

In light of this, business leaders are rightfully trying to understand and react to this indefinite new world. To whit, 81% are concerned with the technological pace of things, according to KPMG's recent U.S. CEO Survey. Three quarters are uneasy about faster-moving new competitors. And two thirds believe the next three years will be more critical than the past 50.

How, then, should forward-thinking organizations adapt? In our view, if digital is cannot be grasped, it's probably not something you should try reaching for. At least not directly.

For example, some companies have created new positions such as "chief digital officers" or formed "digital centers of excellence." Others have hired "digital" agencies to help them "transform" or change completely, even though the namesake only considers part of the blurred boundary. In this way, digital becomes a checklist item, if not a singular department that operates separately from the rest of the "analog" organization.

Although well-intentioned, this approach might subconsciously lead to long-term oversights. What's the most responsive and responsible path then?

We believe digital is broad in its impact, but also industry-specific. Since middle and back-office functions often set the tone for the whole organization, digital initiatives must reach far beyond customer-facing front office operations. In other words, business-wide.

KPMG is unique because we have not created a separate practice or brand around digital. Rather, we leverage our strong relationships with a diverse number of chief officers and executive boards to better inform our understanding and vision for the future. This allows us to be both responsive and responsible with our advice and recommendations on digital best-practices.

To date, we've already developed industry-specific transformation campaigns in healthcare, finance, consumer products, and government, and are in the process of creating them for leading insurance, manufacturing, and technology clients. In doing so, we rely heavily on our end-to-end expertise and unwavering gaze on the economic viability of new investments.

This year more than ever, corporate executives and government leaders have a fiduciary responsibility to understand the mixed reality taking place around them. When considering a trusted advisor, I hope you share our opinion that digital is bigger, broader, and arguably more enigmatic than any of us first thought.