

NUCLEUS
RESEARCH

NUCLEUS TOP TEN PREDICTIONS FOR 2019

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THE BOTTOM LINE

Nucleus's top 10 predictions for 2019 look at rising and falling trends and revisits two topics we took on last year. We look at high-flyer Slack and reassess the value of Alexa. IBM takes a hit again as we sincerely hope the board of directors reassesses the direction of that wandering ship. Embedded analytics and micro coaching both rise as does multi-factor authentication in this increasingly hostile online environment. The technology that supported remote workers is now able to track their output, forcing managers to reassess the real productivity of employees who work from home. Finally, the PC market isn't dead, but in a cloud-centric world there's little incentive to upgrade desktop hardware.

SLACK OFF

Could Slack be the most detrimental piece of software ever invented? The promise was agility built on greater, more rapid collaboration. Millennial friendly if you will. Unfortunately, organizations we've investigated say it's more likely to foster a knee-jerk, twitter-esque environment. Worse still is the potential loss in productivity with one organization estimating a rather high 10% loss after deploying Slack. From the management side, there's everything wrong with Slack. No sense of tone and group-think direction, combined with the need to react to every employee who wants to voice an opinion, makes it a non-stop threat that needs constant adult supervision. One user complained they received a Slack request from an employee sitting a few feet away from them. We expect organizations to recognize the challenges of Slack, and either tightly manage it or kill it before it kills their company.

Alexa grew up and is ready to go to work.

ALEXA FOR BUSINESS

Granted, we're seeing small steps now, but in 2019 we'll see further inroads of Alexa in the business environment. One of the most functional commands of Alexa for Business in 2017 was "please turn on the lights in the conference room." Disappointing then, but a lot has changed in the past year. Unlike the recent virtual reality hype that promised but didn't deliver "the future today," Alexa grew up quickly and is ready to go to work with advanced machine learning capabilities and greatly improved natural language processing. Amazon supports developers with access to Alexa Voice Services, encouraging the development of custom skills with the Alexa Skill Kit. Alexa can still turn on the lights, schedule a meeting, and order pizza, but connectors and integrations with core business applications are rapidly adding value for the corporate user. We expect to see Alexa "display Region 1's sales for Q1, and compare to same period last year" very soon and without any effort. That said, we'll wait a bit before we take our hands off the controls and ask Alexa to "intercept the glideslope, extend the flaps, and reduce airspeed to 85 knots." Still, given the choice, we'd rather ask Alexa than Siri.

IBM COMES AROUND

Just kidding. If we see anything pointing up for IBM in 2019, it will be the stern of the ship just before it sinks below the waves. IBM offers us no end of metaphors, so today we'll say it's wandering around like a dementia patient. The complete lack of marketing direction and overall sense of desperation among employees is palatable as it jumps on any trend. We half expect the next marketing campaign to promote "The Watson Blockchain Powered by the IBM Cloud." Seriously, there's probably someone at IBM who likes that idea. Granted there are gems at IBM but the current management team seems incapable of setting a clear direction or articulating a marketing message that builds on those gems. We were adamant that Ballmer needed to go before Microsoft would turn around and we're even more adamant now with IBM. Rometty, you gotta' go.

**IBM continues to face challenges.
Disappointing for a company that should
be doing a lot better than it is.**

Update: We wrote the paragraph above in mid-October when this note went to editing. In late October IBM announced a \$34B acquisition of Red Hat with Rometty calling it a "game changer" for cloud services in the IBM press release. Ignoring the cliché 90's hyperbole (did it "raise the bar" as well?), Red Hat will do little for IBM other than burn money. We expect Microsoft, AWS, and Google are already taking a hard look at their Linux strategy.

STAND ALONE IS DONE FOR HCM

That's it. We're calling it. The future of Human Capital Management is integrated suites. Best of breed players need to find a dance partner or start closing up shop. In the past, best-of-breed players have been able to stay alive by delivering faster innovation, but today the value of HCM builds on a single integrated database, leaving best-of-breed players at a disadvantage. Add the move to cloud, which accelerates pace of innovation by the suite leaders, and the once-nimble best-of-breed players fall even further behind. Throughout 2019 we expect to see acquisitions of the key best-of-breed players in the market, and, by the end of 2019, a limited future for the remaining players.

EMBEDDED ANALYTICS DOMINATES

A round of analytics for everyone. In 2019 we expect to see the concept of analytics change dramatically. Once the domain of specialists using analytics applications and visualization tools, we'll see the rise of embedded analytics, and interestingly, few will notice. Analytics will become a part of a solution, offering a look backward or forward from within a solution directly to a user (yes, it's called "when needed and in context" but we're sick of hearing that). For example, sales reps will see sales history and projections from within the CRM system and marketing managers will see campaign results without even thinking of the word "analytics." Yes, the analytics technology is there today, the real change we hear from vendors will be the user experience and how analytics will be seamlessly woven into the applications.

MICRO COACHING

Automated sales coaching within CRM applications has been a topic for some time and there are dozens of standalone solutions available. Coaching and recommendation engines are common in customer support applications and recommendations are common alerts that pop up in many solutions across most markets. All are overt in nature. They force the user to take note of the coaching and adjust their behavior, either in the moment or in the future. In the next year we expect to see coaching move to a more subtle micro level. Delivering smaller, more pointed suggestions based on machine learning are obvious changes. Less obvious will be adjusting the way information is displayed to encourage user actions. For example, rather than tell a sales rep to spend the next 30 minutes making prospecting calls, the CRM system may offer a list of users to call, logically grouping them into similar types of opportunities with suggested sales scripts. Highlighting next steps and simplifying the actions possible are other ways to guide the user without the need to read a coaching recommendation.

DIGITAL TRANSFORMATION

At this point the "digital transformation" horse is a bloody pulp, but it will continue to be flogged mercilessly in 2019. Unsurprisingly, few vendors have a coherent plan of how to get their customers transformed, let alone a product that can take them there. What they do have is a lot of hot air and yarn to spin. Yes, you're investing in ML/AI/blockchain/IoT/bots. No, you don't have a product nor a use case that is market-ready. Until vendors have enabled their organizations to execute on their digital transformation strategies (we're looking at you, professional services and cloud ops!) and have the product capabilities to achieve it, all they have are demoware and roadmaps. And customers are tired of being

sold roadmaps. It's the value that software can deliver today that matters. In 2019, it's time for vendors to put up or shut up.


MULTI FACTOR IDENTIFICATION RISES

Sorry, but that 15-character mashup of your mom's maiden name and your childhood pet just isn't going to cut it as a password anymore. Phishing attacks have become creepily personalized and can be sophisticated enough to bypass most automated defenses like firewalls and junk email blockers. When successful, these attacks can give the hacker complete control of the user's computer and accounts, usually by posing as a familiar correspondent to trick a user into downloading malware disguised as an e-mail attachment. To combat this growing onslaught of security attacks, we'll see even greater use of multi-factor authentication systems in 2019. As society becomes more data-literate, users will demand even more secure methods for protecting their accounts; if vendors don't deliver, customers will choose more secure providers. Moving forward, one thing is abundantly clear: don't take after self-professed "genius" Kanye West – setting your passcode to 000000 is still a bad idea.

Technology that tracks employees work output is highlighting the challenges of workers that work from home.

EMPLOYEES MOVE BACK INTO THE OFFICE

With more ways to track and measure remote workers, it's starting to dawn on management that remote workers, well, hum, don't actually work. Okay, three of you do. The rest of you log in then spend the day running errands and goofing off. Let's face it, productivity for remote workers varies but one thing for sure is that interaction and collaboration suffers. There are jobs that make sense for remote workers including customer support and remote sales. But as technology makes employees more productive, and reduces the number of employees needed, the value those employees bring to the organization changes. For example, much of the activities of the accounting department have been automated over the past 20 years, making the value of those accountants less about performing remedial tasks and more about knowledge work. And knowledge work builds on a foundation of collaboration. Human resources and marketing are other areas that build on employee



integration to do and create more rather than low level repetitive tasks. Look for more employees making the daily commute into the office.

PCS BECOME LESS IMPORTANT

In 2019 we'll finally reach the point of "who cares" when it comes to your desktop PC. With just about everything in the cloud there's practically nothing driving a desktop upgrade. Today, few users pay attention to the chip, memory, or disk size in the current PC they're using. Color, weight, and the ability to run a browser is far more important. Cover the scratches and dings with stickers and if it isn't broken don't mess with it. For most people it takes too long to get a PC back to where you like it to justify purchasing a replacement unless it's really broken. The PC hardware business has always been tough, but the future will make the past look like the good old days.