NICE®

THINKING BIG ABOUT RPA

NICE® & PROFESSOR DAN ARIELY

Inside…

Prof. Dan Ariely,
Duke University

In order to delve deeper into the psyche of human behavior and explore the impact of intelligent desktop robots in the workplace, such as NEVA (NICE Employee Virtual Attendant), NICE partnered with Dan Ariely, a world-renowned Professor of Behavioral Economics and Psychology at Duke University. In a special project called “Thinking Big About RPA”, Prof. Dan Ariely shares some fascinating psychological insights showing the collaborative potential between desktop robots and humans.

Introduction

In today's global economy, many organizations are already reaping the benefits of Robotic Process Automation (RPA) in the form of operational efficiency gains and the delivery of more intelligent and personalized customer interactions. The human element, however, remains critical, giving rise to a rich and diversified workplace where intelligent robots and humans work hand in hand. But who would have thought that the convergence of robots and humans could potentially restore the natural order in the workplace? NICE has partnered up with globally acclaimed behavioral economics expert, Prof. Dan Ariely, to explore this interesting phenomenon in a special project entitled "Thinking Big About RPA." Prof. Ariely sheds some light on the psychological insights which can rejuvenate and bolster the dynamics between human employees and desktop robots, ultimately benefitting the organization as a whole.

The Value of Showing Effort

What is the challenge?

When it comes to deciding how much we value something, we usually don't have an objective standard that we use to make this judgment. Instead, we rely on rules of thumb to help us figure out how much something is worth and how much we are willing to pay for it.

One such rule of thumb that we often use to determine value, is the effort heuristic. This heuristic simply states that when more effort has been put into making a product or service, the more valuable it is. In other words, we often evaluate things not just by what we get, but also, to a large degree, by the amount of effort that has gone into making the product or service.

Consider the following example: Why is it that most of us don't worry too much about downloading a pirated movie, but we would feel extremely guilty if we left a restaurant without paying? In the case of the restaurant, we see the efforts of the chef and the servers, whereas the effort that it took to "serve us" the movie is much less visible.

Many organizations work hard to provide their customers with magical experiences and in the spirit of simplicity they try to hide the effort behind the scenes. This approach could be very good for the service itself, but it is not helpful for creating appreciation in a sense of value. The basic problem is that by making things feel effortless, we're likely to be taken for granted.

What is the solution?

As an organization, you can try to correct the "being taken for granted" problem by making effort more visible to your employees and your customers. Sometimes we call this "operational transparency."

There are two kinds of efforts we want to make more transparent. The first is the fixed effort that goes into the product or service, and the second is the marginal effort that goes into the product or service. The fixed effort is the effort that goes into creating that product and the marginal effort is the effort that goes into serving each and every customer. While making both types of efforts more transparent is important, value creation is particularly sensitive to the marginal effort. This means that if we have to pick which type of effort we want to make more transparent, it is better to focus on the marginal effort. More generally, highlighting effort is one of the best ways to make sure that people don't undervalue the product or service we provide.

What does the research say?

It may seem intuitive that we value things more after seeing someone hard at work producing the product or service. However, this is not the rational way of viewing value and it is not the way that most organizations view things. In the rational framework, value is only about what we get and not about the effort that has gone into something. Consider the following example: if a locksmith spends an hour working to open a door we feel better about paying a high fee than if he completes the job in a minute, even if the end result is the same.

Studies have found that showing effort has a meaningful positive impact on how much people trust and value organizations, products, and services. This principle of making effort visible is also known as operational transparency.

When we get to observe that effort has been devoted to the production of a product or service, it increases our ratings of its quality (1). This is true for managers evaluating their employees' work, but it extends to consumers too: observing an effortful process increases consumer satisfaction as well as feelings of reciprocity and gratitude (2).

Research by Ryan Buell, Ethan Porter, and Mike Norton investigated whether people would like government more if they had a better idea about what it was doing on their behalf (3). Partnering with Code for America, the researchers developed an app where Boston residents could snap and submit photos of potholes around city. Residents were then showed one of two websites:

- Basic: A website that only showed the number of open requests for repairs, along with the number of requests opened and closed the previous day.
- Effort: A website showing pins on a map with the location of these issues, which would each open a photo of the problem along with its description and location.

What version of the website increased citizen satisfaction the most? When participants were asked if "Government often does a better job than they are given credit for," only 34 percent of the participants agreed after viewing the basic website, and 57 percent agreed after viewing the effort website. Participants were then asked about whether they thought the government's effect on their life is generally positive or negative. 76 percent said "positive" after viewing the basic website, and this percent increased to 91 for those who saw the effort website.

More surprising, perhaps, is that this principle seems to work for algorithms too: In another study by Buell and Norton (4), the researchers found that people using a flight-search site actually preferred waiting 60 seconds over getting instant results, as long as they saw a running tally of the tasks being executed (such as "Searching for flights on United… Searching for flights on Delta…").

Replicating the effects in another domain, Buell and Norton showed that the effect extended to other services such as finding matches on an online dating website as well. The introduction of transparency contributed to a 22.2% increase in customer reported quality of the matches. In other words, even when the service provider is an algorithm, consumers also like seeing it "work hard" for them!

An important caveat to operational transparency is that effort alone is not enough; it must also be coupled with a positive outcome. We need to like what we get as a starting point, but from this starting point, showing us effort can make us like it even more. For example, in Buell and Norton's online dating study, users were more satisfied when they saw the website working hard for them during the serach. However, this was only the case if they ended up with matches they considered attractive or average looking at the end of the search.

What does this mean?

Organizations should make more thoughtful decisions about what to show and what to keep hidden. In the world of value perception, faster service isn't always better and it is important to find the "sweet spot" between service duration, operational transparency, and perceptions of value. In the long term, it is hard not to be taken for granted. If we want to fight this tendency organizations should consider how to portray their effort—particularly their marginal effort.

The NICE Perspective

When it comes to achieving operational transparency in a value-driven business economy, enterprises now have an opportunity to leverage intelligent desktop automation technology in order to highlight the marginal effort. NEVA (NICE Employee Virtual Attendant), is intuitively designed with smart cognitive technology enabling customer service representatives to reach their best potential when serving their customers, in real-time. Although smart Robotic Process Automation technology is designed to streamline operational efficiencies – the personal impact created by a human touch has never been more important. With NEVA automating the repetitive and admin-driven tasks on behalf of the employee, customer service representatives are now empowered with more time to "work harder" for the customer during a live interaction, showing more effort and value.

Moreover, providing the employees with a personal desktop automation illustrates the effort extended by the organization to the employees, allowing them to focus on tasks which they enjoy doing, keeping them engaged and happy.

References

(1) Chinander, K. R., & Schweitzer, M. E. (2003). The input bias: The misuse of input information in judgements of outcomes. Organizational Behavior and Human Decision Processes. https://doi.org/10.1016/S0749-5978(03)00025-6

(2) Bray, R. 2018. Operational Transparency: Showing When Work Gets Done (Working Paper).

(3) Buell, R. W., Porter, E., & Norton, M. I. (2013). Surfacing the Submerged State: Operational Transparency Increases Trust in and Engagement with Government. SSRN. https://doi.org/10.2139/ssrn.2349801

(4) Buell, R. W., & Norton, M. I. (2011). The Labor Illusion: How Operational Transparency Increases Perceived Value. Management Science. https://doi.org/10.1287/mnsc.1110.1376

Navigating Mental Models to Improve Customer Service

What is the challenge?

Every time we deal with a software or person, we create a mental model of what that entity is like and we make decisions based on that mental model. Someone working in customer service, for example, will have an idea about the customer they are serving right now and how to best deal with this person.

These mental models are how our brain handles the large and complex amount of information we need to navigate the world around us. In that way, mental models are very useful as they guide our behavior and help us figure out how to behave and what choices to make. Without such mental models, we would have to start every interaction from scratch and it would be very difficult to predict how people are likely to behave. These are the good sides of mental models, but we have to also recognize that our mental models of the world are not always correct.

Why is it that our mental models of another person are inaccurate? When it comes to our kids, long-time friends, or significant others, we have the time to develop relatively accurate mental models of these individuals. But, when it comes to people we have just met, or have very little information about, and when we have to form these mental models very quickly, we are likely to deal with inaccurate mental models. In fact, the odds that any one customer service representative has a perfect mental model of each customer they talk to is very low.

When our mental models are inaccurate, they are less useful and sometimes they can even be harmful. For example, a person working in customer service at a large company may have the wrong mental model for who they are dealing with, and therefore try to upsell them using the wrong approach or wrong product.

Because mental models are so basic to how we operate, it is impossible to ask customer service representatives to not use their mental models of the consumers they are dealing with. However, there are steps we can take to make sure the models are more accurate.

What is the solution?

Human beings and computer systems are good at different things, and sometimes, the best solution to complex problems can be found by playing to each one's strengths. One complex problem that many businesses struggle with is how to make sure they understand what their customers need.

In customer service, the mental models representatives use to understand their customers are based on their personal experience with previous customers and an even more limited amount of information about the customer they are currently dealing with. Even though the company may have access to more useful information about specific customer needs, customer service representatives cannot always access this information and they definitely can't access it quickly enough to allow for a natural process of interacting with the customer that is both informed and flowing.

To better understand how mental models work, let's consider the example of smart assistants like Cortana, Siri, Google, and Alexa. What tasks are they able to help us with? The designers of these assistants might say that these agents can do everything, but, when we ask users, they don't come up with many questions that they think these smart assistants can help them with. In other words, their mental model for what smart assistants are capable of helping them with is not very extensive.

We then tried a different approach, one that was counterintuitive to the designers of these smart assistants; we restricted the framing of what kind of smart assistant it was. Instead of saying that the user could ask the smart assistant for anything, we said it was an "entertainment assistant," a "scheduling assistant," a "transportation assistant," etc . Suddenly, people had a clear mental model for what they could ask the assistant for and they came up with a lot more ideas: buying tickets, finding showtimes, scheduling meetings, notifying when users were late for a meeting, figuring out traffic patterns and delays, and so on.

This example highlights that our mental models are a barrier to good use if they are not the right mental models, and that by correcting the mental models we can dramatically improve the outcomes.

Of course, computers do not have the same problems with mental models as humans do. Computers can process large amounts of information with ease, creating a model for what a specific customer is like, and help the human representatives as they interact with their customers. This way the representatives can have the superhuman ability to process large amounts of information, and propose the best way to address customers' specific needs in a more accurate, friendly, and personalized way.

What does the research say?

Research in behavioral science has found that as human beings, we have a fundamental need to feel certain about the world around us and where we fit into it (1). When there's uncertainty, we feel threatened and start to actively seek out ways to reduce or make the uncertainty more manageable (2).

So, what are some of the ways we manage uncertainty, especially given that we live in a world where we need to navigate an incredible amount of complex information?

Thankfully, our minds are able to create representations, or mental models, for how we expect the world to work. Mental models can be thought of as our worldview: the implicit and explicit rules of thumb we make to understand the world based on our past experiences. They help us categorize information we have been exposed to in the past, using them to make predictions about similar, but unfamiliar, people and situations. Because we rely on mental models, it becomes easier for us to see the world as stable and predictable, helping us also to take actions and make choices based on what we think will happen next (3).

While our mental models are extremely helpful in navigating the world, they have at least two important flaws: They are not necessarily very extensive and they are not always accurate.

Mental models are like hypotheses of how we expect the world to work. As human beings, however, we have a tendency to consciously and unconsciously seek information that reinforces our beliefs rather than challenge them. This is known as confirmation bias, a phenomenon sometimes also referred to as the "my-side bias" (4).

Confirmation bias not only leads us to give preferential treatment to evidence that supports our views, it can also make us overconfident in our decisions. In a study that highlights this effect, participants in a mock jury trial who were more likely to selectively draw on evidence to build one view of what happened were more confident in their decisions than those who weighed both sides of the case (5).

What does this mean?

When it comes to mental models, confirmation bias leads us to only check the validity of the representations we have. We look for interpretations and cherry-pick information that reinforces what we already believe, which leads us to get more and more stuck in our own mental model regardless of how accurate it really is.

Computers don't have the same limitations as humans (they just have different limitations). They don't have an aversion to uncertainty, they don't need to come up with solutions very quickly, they can hold multiple hypotheses at once, and they don't have confirmation bias.

When it comes to accuracy, computers can also be much better and take into account much more data about the past behavior, preferences, and purchases. Getting help with the aspects that we struggle with could allow customer service representatives to form a much more accurate representation of the needs of any given customer and hence serve them better.

The NICE Perspective

As employees are expected to navigate large volumes of information in their day to day tasks, while also contending with much uncertainty – mental models (with their limitations) will surely kick in. A personal desktop robot, such as NEVA (NICE Employee Virtual Attendant) can intuitively support human employees by bringing more accuracy, structure and focus to the mental models they form during live customer interactions.

Take for example when an employee meets a customer for the first time.Without a previous frame of reference, their mental model may be entirely inaccurate. The desktop robot has the capabilities to present relevant and contextually rich information to the employee to assist them to form a more accurate profile of the customer. It does so by extracting relevant data from any and multiple enterprise applications in real time and intuitively displaying this information (in an interactive pop-up screen) to the employee at the precise time at which they need it. Not only does this save the employee the time and effort of collecting this information, but it also achieves accuracy when presenting the employee with a broader, more extensive context for forming the mental model.

References

(1) Weary, G., Jacobson, J. A., Edwards, J. A., & Tobin, S. J. (2001). Chronic and temporarily activated causal uncertainty beliefs and stereotype usage. Journal of Personality and Social Psychology.

(2) Van Den Bos, K. (2009). Making sense of life: The existential self trying to deal with personal uncertainty. Psychological Inquiry.

(3) Van den Bos, K., Poortvliet, P. M., Maas, M., Miedema, J., & van den Ham, E. J. (2005). An enquiry concerning the principles of cultural norms and values: The impact of uncertainty and mortality salience on reactions to violations and bolstering of cultural worldviews. Journal of Experimental Social Psychology.

(4) Nickerson, R. S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises. Review of General Psychology.

(5) Kuhn, D., Weinstock, M., & Flaton, R. (1994). How well do jurors reason? Competence Dimensions of Individual Variation in a Juror Reasoning Task. Psychological Science.

How Automating Boring Tasks Makes Everyone Better Off

What is the challenge?

Over the past few centuries human ingenuity has helped us make tremendous progress in overcoming our physical frailty. We have made this progress by creating technology that helps us manage our life in a much better way. Among other things, we invented chairs to allow us to sit for many hours, light to see in the dark, heating and cooling to withstand different temperatures, and cars and planes to make it possible for us to travel great distances quickly.

While the progress in our physical life has been tremendous, we have yet to make the same kind of progress when it comes to our mental life. Modern life, both personal and in the workplace, is becoming increasingly more complex, yet creating tools to help with our mental limitations are often misunderstood and ignored.

One place where we have not yet made sufficient progress to improve our mental life is in improving the excitement of work for all employees. For example, many companies often ask employees to do repetitive, time-consuming tasks that are boring with no room for any agency and no sense of achievement or progress. These are draining tasks that employees just want to finish as soon as possible.

Such tasks are not only demotivating to employees, they also open the door to error. When we engage in a long set of boring tasks that don't require much of our conscious attention, our attention naturally drifts away after a relatively short time, and in this type of situation, mistakes are more likely to occur. With this in mind, any system that does not take interest, attention, and attentional-drift into account is a poorly designed system.

When mistakes happen, it's easy to put the blame on the employee who made the mistake rather than the underlying causes including the system design and the nature of our attentional system. But, the reality is that we shouldn't be surprised when mistakes occur if the system we designed requires employees to do mundane and repetitive tasks for hours and hours and only occasionally pay attention or react differently.

What is the solution?

Companies need to design processes and work environments in a way that takes our mental and attentional limitations into account. Doing so can reduce errors and provide a lot of benefits for the company, while also improving the well-being of employees.

When it comes to the problem of having to do tasks that are boring and repetitive, automation can help take the boring mechanical parts away from people and free up their time for more interesting and challenging parts of their jobs. This is not just good for overall morale, it is also important for overcoming mistakes. When tasks are not interesting, our attention drifts to something else and we open the door to more mistakes. Computers do not have these problems, since they can hold focus without getting distracted or fatigued. In this way, people and machines make powerful teams if we can form collaborative relationships that play to each of their strengths.

This is why employers should design work environments that help their employees direct attention to the parts of their jobs where they must focus, and not assume that they can have high attention at all times. If done right, automating repetitive tasks can make everyone better off.

What does the research say?

We don't like to be bored and being bored, at work tends to make us especially miserable. At work, boredom is linked with a number of negative outcomes, such as poor performance, anger, accidents, errors, absenteeism, stress, increased risk-taking, sleepiness, stress-related health issues, job dissatisfaction, and property damage. These are often caused by an inability to sustain attention and by switching our attention to something that is more stimulating (1, 2).

By automating some of our boring tasks, technology can offer a solution to these problems. Although a lot of people worry that machines will take their jobs, it seems unlikely that entire occupations will be automated away any time soon. What we are seeing, however, is that the mixture of tasks that employees engage in is changing (3).

Don Norman, a design researcher at the University of California at San Diego, has long argued that human error is often a design error. In his famous book from 1988, "The Design of Everyday Things," he argued that when automation works, the tasks are usually done as well or better than by people. Moreover, it saves people from boring tasks, allowing more useful, productive use of time, reducing fatigue and error (4).

Instead of blaming human error on the individual employee, companies should take into account that human beings have predictable limitations when it comes to our attention spans. Companies should also take into account the wonders of human motivation and the human craving for novelty and variety. It is possible to use technology to design work environments where human beings use technology as a tool to free up their time and focus on more interesting tasks. We should create collaborative systems that play to the different strengths of humans and computers: Humans are flexible, versatile, and creative, but we have a limited attention span. On the other hand, computers are more rigid, precise, and don't get fatigued or bored.

Don Norman has further argued that for the human-computer interaction to work well, we need to pay attention to the hierarchy of the system. In his view, instead of asking people to fill in for gaps in machine performance, we should require machines to fill in for gaps in human performance. As an example of this, consider how we use calculators. The calculator doesn't do mathematics in the same way as a person would, but they don't make errors and it can solve problems that people can't. But it needs a human to figure out what problems to look at and how to state it (4). In this approach to human-machine interaction, people are not out of the loop, and the machine is at the service of the person in charge (5).

One example of such a collaborative relationship between humans and machines comes from the Japanese car manufacturer Toyota. One of the pillars of their production system is known as Jidoka, or "Automation with a human touch." Also known as "autonomation," the concept originated in the early 1900s, when Sakichi Toyoda invented a textile loom that stopped automatically when any thread broke. Because it would stop and alert the operator immediately, it was easy to identify and eliminate the problem. Because the rest of the process was automated, employees could operate more machines and only engage when they needed to solve a problem (6).

What does this mean?

When used correctly, automation can empower employees and reduce errors.

Instead of computers taking over entire occupations, they are better used as tools to improve our work and make our workplaces more engaging and creative. When we create a collaborative relationship that plays to the different strengths of humans and machines, we are all better off.

The NICE Perspective

The unique collaboration of the human and virtual workforces reinvigorates humans to focus better and access creative thinking. With intelligent robots taking away the repetitive tasks requiring processing speed and accuracy, humans are freed up to focus on what they do best, being human. While robots handle all the 'boring' tasks which can dampen the human spirit – human employees have more time and space to grow their unique talents and creative potential.

However, the enterprise first needs to identify which processes, or sub-processes, would be the most worthwhile to automate. This can be done using NICE's Automation Finder technology. The next step would be to invest in personal desktop robot technology such as NEVA (NICE Employee Virtual Attendant), which assists employees with their daily tasks, guiding them through complex processes, and automating the routine, time-consuming ones. Investing in a personal desktop robot for employees is ultimately an investment in their well-being.

The future of work will see both the virtual robotic and human workforces collaborating and working hand in hand. As such, organizations will start becoming more mindful of designating the appropriate tasks to each workforce, understanding how to better manage the limitations and leveraging the strengths of each.

References

(1) Mann, S., & Cadman, R. (2014). Does Being Bored Make Us More Creative? Creativity Research Journal.

(2) O'Hanlon, J. F. (1981). Boredom: Practical consequences and a theory. Acta Psychologica, 49(1), 53-82

(3) Chui, M., Manyika, J., & Miremadi, M. (2015). Four fundamentals of workplace automation.

McKinsey Quarterly.

(4) Norman, D. (1988) The Design of Everyday Things.

(5) Endsley, M. R., & Kiris, E. O. (1995). The Out-of-the-Loop Performance Problem and Level of Control in Automation. Human Factors: The Journal of the Human Factors and Ergonomics Society.

(6) Jidoka–Toyota Production System Guide (2016) https://blog.toyota.co.uk/jidoka-toyota-production-system

The Human Tendency to Cut Corners

What is the challenge?

About twenty years of research on dishonesty has taught us that in our daily life, as well as in organizations, there are many people who cheat just a little bit and not many who cheat in extreme ways.

One of the main reasons these small ways of cheating are so common is because of conflicts of interests. As we go about our workday, there are often tradeoffs between getting things done quickly and getting them done right. This conflict of interest can make it very tempting to cut corners—not just for our own selfish benefit, but in order to get the work done in a timely manner. On top of that, many of these “shortcuts” seem harmless because we can’t see exactly who we hurt by taking them.

And that’s exactly why a lot of us, under conditions of time constraints and pressure to get the job done, are likely to cut corners and bend the rules. Because each of these actions seem so innocuous, we are able to tell ourselves that we are good, honest, and wonderful people who are just getting things done.

Yet, over time and given their frequency, such dishonest behaviors can create greater damage to companies. Just think about the recent scandals and ask yourself if these started with the intention of corporate fraud or with conflicts of interests and a slippery slope.

It is sad, but important to realize that we all have this tendency to cut corners. And the more we do it, and the more we get away with it, the more we learn that the world is just fine when we bend the rules. In this loop of acting badly and not getting caught, cutting corners becomes self-reinforcing, and we’re more likely to continue behaving badly and even extend our repertoire of cutting corners. When we have conflicts of interests, coupled with the inability to see the consequences of these seemingly harmless violations, it can start us a on a path towards even worse transgressions.

Consider the example of texting and driving. Even if we know it’s risky, one day we choose to quickly reply to a message while we’re stuck on a red light. Then, having seen that nothing bad happened, we might do it again, or even start replying to messages and checking Facebook while we’re driving.

In the workplace, cutting corners can mean a lot of different things. A doctor may feel pressure to see all of the patients in her waiting room during a specific time allotted for each person, not giving each of them the full check-up they may need. An employee at a call center might skip asking a customer about an upgrade or whether they have other problems they want to address in order to save themselves time. These individuals may know that they should do these things, but they also have time pressure and it’s easier in the moment to just succumb to the time pressures and move on to the next task.

What is the solution?

In the moments we're tempted to cut corners, we need a mechanism to help us overcome these temptations.

The code of conduct should never be fuzzy, as it's more difficult for us to see when we are violating it. When we have clear, well-communicated norms about what the correct behavior is and what is expected of employees, it's more difficult to rationalize cutting corners. For example, if we can't continue on to the next task before finishing the current task in the right way, we are more likely to do that task the way it's meant to be done.

In other words, when we put in place clear procedures and rules, it's much more psychologically difficult to break them in order to save time. Not giving ourselves the room and permission to cut corners may be painful in the short term, but it is certainly much better for us and for business in the long term.

What does the research say?

We like to think of ourselves as good, honest people (1). However, studies have shown that we're able to keep this positive image of ourselves as long as we only cheat a little bit.

In a series of studies known as "matrix experiments," participants are given 20 simple math problems and asked to solve as many as they can in five minutes. They are then asked to put their test paper in a shredder, before letting an experimenter know how many problems they solved. For each problem they say that they solved, they received $1 (2,3).

What they didn't know, was that the shredder only destroys the edges of their test paper - allowing the experimenter to compare how many problems they got right to how many they said that they solved. Almost 40,000 people participated in these types of experiments, but only 20 claimed to have solved all the problems—costing the researchers about $400. The far larger impact, however, came from the 70% of participants (around 28,000 people) who cheated "only a little bit" but ended up costing the researchers more than $50,000.

In addition, because we don't like to challenge the view of ourselves as good people, we are better at justifying small indiscretions than major violations. As a result, we're more likely to "start small" and build up to more serious behavior than to suddenly do something very bad out of the blue (4).

This "slippery slope" towards worse behavior isn't always obvious to us. In fact, it often happens without our awareness. And it's not just us: Lab studies by researchers such as Francesca Gino and Max Bazerman have shown that people are more likely to accept others' unethical behavior when they get slowly worse over time instead of in one abrupt shift (5).

Given that cutting corners and slowly sliding towards worse behaviors is relatively easy to do, how can organizations set up systems that help us avoid transgressions?

If we feel like we are able to cut corners without consequences, we are more likely to do it. There are many cues we take to determine whether there will be consequences for these actions.

The REVISE framework, developed by Ayal, Gino, Barkan and Ariely (6) offers three useful principles to help us think about these cues:

1) Reminding. People take advantage of grey areas to justify transgressions. If the rules are fuzzy, it's easier to argue that we weren't sure what the correct behavior was. We want to remind people about what the correct behavior is, and also about their own standards.

2) Visibility. If we don't have anyone holding us accountable to our actions, we feel like we can get away with transgressions. More visibility also helps shape social norms, and if we see others do the right thing, we are more likely to do it.

3) Self Engagement. People usually care about being a good person but think about it mostly in abstract terms. Help employees become aware of temptations and to commit to behaving better because they want to stay true to their own values.

What does this mean?

To avoid the slippery slope of cutting corners, companies should recognize that employees need mechanisms to help protect them against their very human tendencies. When we have a lot of tasks competing for our attention, it's quite easy to let our standards slip. And if companies create work environments that let it happen, it will harm them in the long run.

To create such mechanisms, we need to identify the moments where conflicts of interest might lead employees to cut corners. These are the moments where we can intervene to help protect us from making decisions that harm both the employees and the company in the long term.

Then companies need to address the cues that suggest cutting corners is acceptable. Here, it's useful to keep three principles in mind: reminding, visibility, and self-engagement.

That means doing things such as creating clearly communicated processes and rules that help remind us to complete the task at hand before moving on to the next thing, establishing clear social norms about what the correct behavior is, and creating systems that hold us accountable for our behavior.

The NICE Perspective

When under pressure, humans are wired to cut corners, with potentially detrimental results to businesses. But what if this could be gently circumvented with smart desktop automation technology?

NEVA (NICE Employee Virtual Attendant), is a personal desktop robot with built in real-time responsiveness, perfectly designed to prevent employees from taking short cuts. NEVA prompts and guides employees in real-time, in a context specific manner, to ensure that they are fully aligned to the specific policies and procedures of an organization, by intelligently enforcing important, compliance driven tasks in real time.

In addition, NICE Desktop Analytics is an effective tool to leverage when organizations need to accurately identify compliance or process driven breaches, giving the organization a holistic view of where employees need more guidance for staying on the right process path. And with a personal desktop robot by their side, cutting corners is less likely to happen.

References

(1) Mazar, N., Amir, O., & Ariely, D. (2008). The Dishonesty of Honest People: A Theory of Self-Concept Maintenance. Journal of Marketing Research.

(2) Gino, F., Ayal, S., & Ariely, D. (2009). Contagion and differentiation in unethical behavior: The effect of one bad apple on the barrel. Psychological Science. https://doi.org/10.1111/j.1467-9280.2009.02306.x

(3) Ariely, Dan (2012) The (Honest) Truth About Dishonesty: How We Lie to Everyone - Especially Ourselves.

(4) Welsh, D. T., Ordóñez, L. D., Snyder, D. G., & Christian, M. S. (2015). The slippery slope: How small ethical transgressions pave the way for larger future transgressions. Journal of Applied Psychology. https://doi.org/10.1037/a0036950

(5) Gino, Francesca, and Max Bazerman. "When Misconduct Goes Unnoticed: The Acceptability of Gradual Erosion in Others' Unethical Behavior." Journal of Experimental Social Psychology 45, no. 4 (July 2009): 708–719.

(6) Ayal, S., Gino, F., Barkan, R., & Ariely, D. (2015). Three Principles to REVISE People's Unethical Behavior. Perspectives on Psychological Science.

What We Measure Shapes What We Do

What is the challenge?

A popular phrase in behavioral economics is “We are what we measure.”

The basic idea behind this phrase is that when we decide to measure some specific, quantifiable attributes of something, we make those attributes more important than the ones we decide not to measure. Not because these attributes are in fact less important, but because the measurement itself redirects attention and the increased attention increases the importance.

Consider something like consumer reports: When the designer of a particular report decides which attributes to use for the comparison (for example pixel size, quality of sound, etc.), they highlight those specific attributes, focus attention on them and make them more important in the final decision of which product to pick.

The principle of “we are what we measure” is true for employees as well. When employers highlight specific metrics as a way to measure success or productivity, employees change their behavior and focus more on the aspects that are measured at the expense of the attributes that are not measured (and sometimes at the expense of overall productivity).

With this in mind, employers need to carefully decide which dimensions they want to measure, how to measure that particular behavior, and how to present this information back to employees.

In addition to the challenges of what to measure (and what not to measure), setting up measurements in a way that empowers and does not micro-manage the employee is another important challenge. On the one hand, we want to be able to measure detailed performance in order to give feedback about how employees are doing and how they can improve. On the other hand, when employees feel that they are being excessively monitored, it can have serious consequences on their motivation and wellbeing—reducing and even reversing any benefits of measurements in the long term.

So what is the right thing to do? Do we want to measure attributes such as speed of calls, number of upsells or customer satisfaction ratings? Or perhaps something else entirely? How do we direct attention to the right tasks, and how do we use the measurement approach to improve motivation and not undermine it?

What is the solution?

With the increasing use of technology in the workplace, we have the opportunity to know more about how employees behave in more detail, than ever before. There are lot of different dimensions of employee behavior we can measure, and choosing the right ones is crucial.

To choose the right behavior to measure, we should consider the following key factors:

- Highlight the behavior you want employees to focus on. By highlighting certain behaviors, employers can help redirect employees' efforts. Remember that what is measured will cause employees to pay extra attention to it at the expense of activities that are unmeasured.
- Protect employee wellbeing, as it will serve you better in the long term. Feeling excessively monitored can have a number of negative effects on employee behavior. Make careful decisions about which measurements you care about the most and be transparent about the intentions behind tracking them.
- Encourage the process, rather than the outcome. Too often, employers highlight metrics that are focused on the outcome rather than the process. Figure out which specific behaviors are linked to positive outcomes and encourage those behaviors.

What does the research say?

Quantification of behavior is an increasing part of our daily reality. We track our sleep, physical activity, how many calories we eat, and how productive we are. Over one-in-five adults in the United States use some form of personal health tracking device (1).

Quantification of behavior does more than simply provide information. Researchers have shown that the measurement itself can have similar effects to an external incentive (2). This means that just by measuring something, we draw attention to that particular aspect of our actions (3) and this, in turn, can act as a strong motivational force to change behavior in the direction of the aspect that is being measured.

One potential pitfall of measurement is related to the "crowding out" that financial incentives sometimes have. In the realm of financial incentives, it has been repeatedly shown that adding a small financial incentive can change the motivation from a social motivation to a financial motivation, resulting in a decrease of overall motivation. For example, imagine that I asked you to help me change the tire on my car as a favor or in exchange for $5. Most people would be willing to do it as a favor. But the addition of the $5 takes the activity from the social realm into the financial realm and most people would refuse to help. In a similar vein to providing external incentives, highlighting quantitative outcomes can undermine intrinsic motivation. A study by Jordan Etkin from Duke University found that over time, individuals whose behavior was tracked enjoyed the activity less, and did less of it when it wasn't tracked (2).

There are other reasons to be careful about how you measure employee performance. Researchers have suggested that some ways of monitoring employee behavior may be harmful to their well-being. When employees feel like they are being constantly monitored, their workplace stress increases (4), they feel more alienated (5), are worse at problem solving (6), have lower job satisfaction, and feel like the quantity of their work is more important than the quality (7).

What does this mean?

Often, companies include a lot of measures of behavior and productivity without realizing the potential positive and negative effects of these measures. Understanding how measurements work and recognizing the serious impact of getting measurements wrong is important for setting up the measurement system for success.

Even though it may seem appealing to track as many employee behaviors as possible, it is important to realize that measurements are a way to focus attention and that attention is a limited and rather scarce resource that should be managed with care. What we measure is important, but so is how we display it and of course what we opt not to measure. Finally, it is important to keep in mind the welfare of the employee and make sure that employees feel that they are being watched for the purpose of continuous improvement.

The NICE Perspective

The dynamic between human behavior and analytics is a fascinating and multi-faceted subject. NICE Desktop Analytics, in particular, is a manifestation of human behavior that is captured and empirically measured and monitored on the desktop. The employee's desktop is a significant place from which to obtain deep and meaningful insights, not only about the employee's desktop actions or behavior, but also for pinpointing those areas where they need assistance.

In order to keep productivity and motivation levels up, the next step is to equip employees with the support they need to succeed. This is where an intelligent desktop robot such as NEVA (NICE Employee Virtual Attendant) comes to the rescue. NEVA is designed to fully support employees to achieve their goals and KPIs and to help redirect their efforts to the specific areas that matter most.

References

(1) Fox, S., & Duggan, M. (2013). Health Online 2013.

(2) Etkin, J. (2016). The hidden cost of personal quantification. Journal of Consumer Research. https://doi.org/10.1093/jcr/ucv095

(3) Kruglanski, Arie W., Irith Friedman, and Gabriella Zeevi (1971), "The Effects of Extrinsic Incentive on Some Qualitative Aspects of Task Performance," Journal of Personality, 39 (4), 606-17

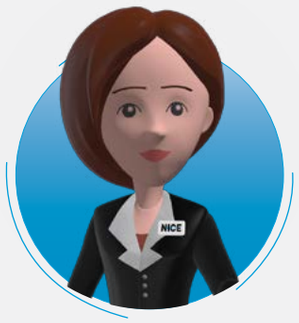
(4) Aiello, J. R., & Kolb, K. J. (1995). Electronic performance monitoring: A risk factor for workplace stress. In S. L. Sauter & L. R. Murphy (Eds.), Organizational risk factors for job stress (pp. 163-179). Washington, DC, US: American Psychological Association.

(5) Aiello, J. R., & Kolb, K. J. (1995). Electronic Performance Monitoring and Social Context: Impact on Productivity and Stress. Journal of Applied Psychology.

(6) Brian K. Laird, Charles D Bailey & Kim Hester (2018) The effects of monitoring environment on problem-solving performance, The Journal of Social Psychology, 158:2, 215-219

(7) Botan, Carl. (1996). 'Communication Work and Electronic Surveillance: A Model for Predicting Panoptic Effects'. Communication Monographs - COMMUN MONOGR. 63. 293-313.

NICE® ROBOTIC AUTOMATION
Automation for the People



Meet NEVA

NICE Employee Virtual Attendant (NEVA).The first ever virtual attendant designed specifically with the employee in mind.

Whether your employee needs help during a call with a customer, or as they're working on a lengthy offline process, NEVA is there to help.

NEVA is extremely resourceful and knows all about your company's systems, processes and policies, and can activate any application to get the job done.

Always Switched On, even when you can't see her, waiting for the perfect moment to pop up with the right information, or to automate a routine task.

NEVA is super intelligent and understands what the employee wants to achieve by observing and interpreting their desktop activities and responding to voice or text requests.

Leave it to NEVA

To learn more, visit www.nice.com/neva

For a deeper analysis of your specific process automation needs, contact your NICE RPA representative today | nice.com/rpa

About NICE

NICE Ltd (Nasdaq: NICE) is the worldwide leading provider of both cloud an on-premises enterprise software solutions that empower organizations to make smarter decisions based on advanced analytics of structured and unstructured data. NICE Ltd helps organizations in more than 150 countries, including over 80 of the Fortune 100 companies, which are using NICE Ltd solutions.

Americas, North America

T +1 551-256-5000
F +1 551 -259-5252

EMEA, Europe & Middle East

T +44 0 1489 771 200
F +44 – 1489 771 665

Asia Pacific, Singapore Office

T +65 6222 5123
F +65 6222 5459