The "Google" Paradox: Is Technology Making Us Smarter?

by LTC Corey W. Harris

In today's fast-paced and dynamic environment, many of us find ourselves increasingly reliant on technology and automated data systems to function in our personal and professional lives. In many instances, our favorite electronic device, mobile app, or indispensable software program has made our lives easier and allowed us to focus our time and energy in other areas. In general, technology has created tangible and intangible benefits in our society but it has also presented some potential unintended consequences. According to an article entitled "Google Effect: is technology making us stupid?" Ms. Genevieve Roberts summarizes the findings of an experiment conducted by Ms. Betsy Sparrow, Ms. Jenny Liu, and Mr. Daniel M. Wegner which came to be known as the "Google Effect." This experiment was completed in 2011 among four groups of students at Columbia University and Harvard University, and the theory culminating from the study suggested that technology is changing the way we think and learn. In her article, Ms. Roberts offers several examples of how people have decided to rely on "Google" for answers and how this decision may affect our cognitive ability in our daily lives. Regardless of whether you buy into this theory, I think we need to examine whether our decision to rely on technology, instead of investing the time to learn and commit details to memory, is affecting our capacity to learn and execute our daily tasks.
The basic premise of the “Google Effect” is that people do not commit information to memory because they consciously or subconsciously take solace in the fact that a quick computer search will provide them with the answers they are seeking. Our electronic “aids,” in essence, become extensions of our own memories and thought processes. Research has shown that more and more people are relying on automated tools such as “Spell Check” and “Auto Fill” when they are entering data, typing messages, etc. This has impaired some people’s abilities to fully remember facts, spell words correctly, and other things which we traditionally gain through repetition and rote memorization. Nicholas Carr, author and 2011 Pulitzer Prize finalist, states that “human memory is not the same as the memory in a computer: it’s through remembering that we make connections with what we know, what we feel, and this gives rise to personal knowledge. If we’re not forming rich connections in our own minds, we’re not creating knowledge.”

If you are wondering how the “Google Effect” applies to the Financial Management (FM) community, I think if you look closely you will see the potential implications of depending upon technology as a memory aid or a substitute to in-depth research and learning. It seems as if we are quick to do a keyword search in an electronic database, online regulation, or other automated tool to find a specific answer to a specific question versus taking the time to research and learn the full details associated with the respective process or task. This perhaps helps us complete the task sooner and ensures we obtain the most recent information, but it may not allow us to fully understand the process in a way that we can analyze and utilize the information to help us do our jobs better. For instance, if we needed to find something in the DoD Financial Management Regulation, many of us would do a computer search on the specific topic and only read the information that applies to the question we are trying to answer. We often don’t take the time to try to relate how the topic we researched fits into the bigger picture and, more often than not we do a “brain dump” on the information after we have used it for its purpose. Occasionally, this puts us in a position where we don’t have the depth of knowledge we need to fully answer the questions asked of us and thus we frequently have to “get back” to someone because we don’t know the answer to something. Because computers and software developers are designing systems and tools to “think” for us, we also sometimes miss the interlinking relationships between various processes and how we can use the software or system in advanced and creative ways to expand our current capabilities. In a similar vein, much of the FM training and other developmental training we currently receive is delivered via computer based training. While this type of training can be just as effective as other training methods, it is typically focused on a very specific task or process and does not afford opportunities to branch into other concepts or functions that are not specifically highlighted in the lesson material. Routinely, students seem to only remember what they saw on the screen or heard during the narration to accompany the training, and it may not be sufficient to create the connections which lead to enduring personal knowledge like Mr. Carr mentioned above.

I also think signs of the “Google Effect” are manifested in our dependence on FM Systems to aid us in accurate and timely financial stewardship. Many of us are accustomed to entering data in a system and assuming the product we reach at the end of the query is accurate. However, sometimes we don’t truly understand the linkages between the different processes and financial transactions required to produce the results or what the results might really be telling us. In instances where something does not go according to script, we may not know how to fix the error or we could possibly not even know the data is flawed in the first place. Also, when a system goes down for maintenance or there is a loss of Internet connectivity, work seems to come to a screeching halt because some people have to learn or re-familiarize themselves with manual processes that were once commonplace in FM offices. Many of us have grown to rely on these systems to do much of
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the processing, and in some cases, thinking for us, so we don’t bother exploring new ways to better utilize some of the untapped functionalities and hidden capabilities embedded in them. Often times, these systems are “commercial off the shelf” products that have useful tools designed into the original programming, but we are not taught to use them. Therefore, they go unutilized unless someone takes it upon themselves to really learn the “ins and outs” of the system.

It is likely we will continue to depend on technology to do our jobs, but I think we need to work on ensuring phenomena, such as the “Google Effect,” do not take root within our organizations’ culture and erode our analytical ability and intellectual capacity. Overall, technology allows us to be much more efficient and removes some level of human error which can occur during manual processing, but we must have the corporate knowledge to know when the data does not match the anticipated results and how to fix the issue. We must also ensure our workforce understands the inner workings of our systems and how they relate to our manual processes so we can effectively utilize technology and not just rely on it for number crunching, processing transactions, and other routine tasks. If we can find new ways to harness the tremendous power and speed of technology to bolster our analytic ability and create new efficiencies, we may be able to offer better solutions to possibly alleviate some of the pressure to stretch our limited resources to “do more with less.” Understanding the underlying framework also allows us to think critically about how to best utilize the information that technology provides to enable us to be “trusted advisors” to our Commanders, Directors, and other decision makers, who are depending on us for relevant and timely recommendations to some of today’s challenging fiscal issues. Technology such as Google is a powerful tool and will likely be around for the foreseeable future, but I think we need to be cognizant of how it is affecting the way we think and learn so our education and training programs can continue to produce a world-class FM workforce. Instead of being a crutch, technology can do what it was designed for – a way to make our lives easier.

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