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# Innovations in Knowledge Management

The Impact of Social Media, Semantic  
Web and Cloud Computing

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Editors

# Innovations in Knowledge Management

The Impact of Social Media, Semantic Web and Cloud Computing



Springer

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# Foreword

According to one fairly ordinary definition, knowledge management is “the process of capturing, developing, sharing, and effectively using organisational knowledge”<sup>1</sup>. You can easily find other definitions; experts, such as those who have contributed to this volume, can probably find reasons to quibble with this one. But this definition does, I suggest, share notable characteristics with most of the others a person, expert or not, might propose or favor.

First and foremost, this definition makes knowledge management seem like an *orderly* affair. There’s *organization* to it. Its component activities can be subdivided and described; “capturing” is one kind of activity, “developing,” “sharing,” and “effectively using” are different kinds. Additionally, we can reasonably infer from these calm descriptions that the knowledge being acted upon is *compliant*—when we seek to capture or share it, it largely does what it is told, flowing to where we want it to go, or staying where we want it to stay. Also, this knowledge that we manage with our processes is, presumably, *manageable*—that is, it doesn’t overwhelm us with its quantity or forcefulness. Finally, in the terms of this definition, and others like it, knowledge management is largely accomplished and governed by our deliberate *intentions*; we mean to do it, and the activities we consider within the scope of knowledge management are purposeful.

Such a thoroughly domesticated notion of knowledge management, though, seems increasingly out of date. *Knowledge*, which once seemed like a rather tame notion, has, in the era of the Web, social media, high tech surveillance, and big data, become raucous. Or to be more exact, if knowledge needs to be “justified, true, and believed” to qualify as knowledge (as Plato suggests<sup>2</sup>), each one of these qualities has, in recent years, become more complex and contestable, and the ways in which people establish or claim them have proliferated and become more varied.

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<sup>1</sup>Davenport, Thomas H. (1994). “Saving IT’s Soul: Human Centered Information Management”. *Harvard Business Review* 72 (2): 119–131.

<sup>2</sup>The *Theaetetus*, Plato, circa 369 BC.

Knowledge has grown up from a good little boy to a raging troublemaker. Consequently, knowledge management seems less and less like librarians' work and more and more like trying to achieve some kind of order amid revolutionary uprising. Which is the reason we very badly need books like *Innovations in Knowledge Management*. There's always been a need to manage knowledge better, but today this knowledge has become more urgent.

Arguably, the biggest reason is that the sheer *amount* of knowledge that needs to be managed has exploded. Sometime in 2012, the amount of data created in a year, globally, surpassed 2,000 billion gigabytes. Seventy-five percent of all digital data is now created by consumers, mostly using devices they carry around all the time, on their person (today mostly smartphones); this will only increase, of course. Some of the information being created and routinely captured is different in kind than what was available before; more and more, for example, data and information arrive tagged with location information.<sup>3</sup> Data and information are not exactly knowledge, if they are not yet justified, true, and believed. Much data may never become knowledge. But there can be little doubt that as the volume of data and information increase, the quantity of knowledge that we must manage threatens to overwhelm us with its quantity.

The increasing quantity of knowledge has powerful effects. Information that people could once reasonably expect to stay hidden no longer does. It's as if the world, not so long ago, kept its knowledge in well-defined puddles, like the puddles of rain water that persist after a storm. You can intentionally move water from one puddle to another with a bucket, or you can splash a little from one puddle to another on purpose or by accident, but the water didn't use to just flow elsewhere by itself. Now, though, our knowledge puddles have grown and grown and grown, until levies overflowed and boundaries between puddles vanished; the water has continued to rise to constitute a flood. Within the new flood of knowledge, currents move where they will, and quantities and types of knowledge that would have stayed out before now mix and swirl with quantities from far away, forming new and unexpected combinations that escape intentions. Ask a police department whose officers have been smartphone-recorded treating a citizen badly, or a thuggish leader trying to manage his image whether the knowledge they want to manage can be *easily* managed. It used to be that "what happened in Vegas, stayed in Vegas"—no longer; we must now reclassify this principle as fallacy (the "Puddle Fallacy of Knowledge Management"?).

Moreover, amid overflows and the current, some items of knowledge become unexpectedly *amplified*. The dynamics of this amplification of knowledge, which causes some items of knowledge to gain more attention than others, is poorly understood, as of yet. A recent article in the *New York Times* called "How One Stupid Tweet Blew up Justine Sacco's Life," shows just how impactful this

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<sup>3</sup>Patrick Tucker, Has Big Data Made Anonymity Impossible?, *Technology Review*, May 7, 2013, <http://www.technologyreview.com/news/514351/has-big-data-made-anonymity-impossible/>.

phenomenon can be.<sup>4</sup> Though intention plays a part in this phenomenon, as people use social media to try to “hold people accountable” for misstatements and misdeeds, the collective effects are more complex and uncontrollable.

These are just a few of the challenges faced by purveyors of the new knowledge management. This potent and exciting new story about how knowledge behaves (and misbehaves) means the need for research on knowledge management is more urgent than ever. And this book, with its emphasis on social networking and media, context awareness, real-time sense making, and storytelling, answers the call for research that can help us understand the evolving frontier. The distinguished authors you will meet in the pages that follow can guide you toward achievement of favorable outcomes even amid the new seeming chaos.

One suspects that *knowledge*, as it manifests in our technology-enhanced reality, has not finished surprising us. But the ideas in this book will help make you ready for whatever new reality comes to pass...

Robert D. Austin

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<sup>4</sup>Jon Ronson, Feb 12, 2015.

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