Frank Knight initially distinguished between risk and uncertainty in his 1921 book, *Risk, Uncertainty and Profit*. For Knight, a decision setting was risky when decision makers did not know, with certainty, what a decision outcome would be but did know the possible outcomes associated with a decision, along with the probability of those outcomes occurring when a decision was made. Uncertainty, for Knight, existed when decision makers knew neither the possible outcomes nor their probability of occurring when a decision was made.

Research on the causes and consequences of uncertainty continued for many years after Knight’s initial work (e.g., Shackle, 1949). Indeed, in the 1920s Lord Keynes observed that “it is uncertainty, not risk, which is the more prevalent circumstance in economic and business environments” (cited in Teece & Leih, 2016: 5).

Early organization theorists were also interested in the role of uncertainty in business (e.g., Burns & Stalker, 1966/1961; Lawrence & Lorsch, 1967; Thompson, 1967). For example, in his highly influential 1967 book, *Organizations in Action*, James Thompson observed that “uncertainty is the fundamental problem with which top-level organizational administrators must cope” (cited in Milliken, 1987: 133).

Uncertainty was also an important concept among early organizational behavior scholars. Researchers such as Duncan (1972) and Galbraith (1973) focused on perceived uncertainty and acknowledged its multiple sources, including characteristics of the environment, individual cognitive processes, behavioral response repertoires, and social expectations (Downey & Slocum, 1975). This prompted many organizational behavior scholars to explore issues related to uncertainty in individual tasks and roles.
However, by the late 1970s, research in economics, organization theory, and organizational behavior had largely moved away from the study of the causes and consequences of uncertainty and toward the study of individual and organizational decision making under conditions of risk (Knight, 1921). In economics—and work in management based on economics—rational choice assumptions under risk were widely adopted in game theory (Von Neumann & Morgenstern, 1944), expected utility theory (Von Neumann & Morgenstern, 1944), and subjective utility theory (Savage, 1972). And while prospect theory (Kahneman & Tversky, 1979) showed that decision makers rarely made decisions in fully “rational” ways, this research still focused on decision making in conditions of risk (Camerer & Weber, 1991). In organization theory and behavior, the concept of uncertainty proved difficult to measure (Downey & Slocum, 1975) and was largely abandoned in favor of the easier to measure concept of risk or ambiguity (Milliken, 1987).

Given the complexities of today’s global economy, these risk-based decision frameworks from economics, organization theory, and organizational behavior seem overly simplistic and unrealistic to an increasing number of scholars (Teece & Leih, 2016). At the same time, creativity, entrepreneurship, innovation, and invention have become central topics for organizations scholars. This newer work emphasizes the importance of understanding how individuals, groups, and organizations essentially create “something out of nothing” (Baker & Nelson, 2005), enter contexts where neither means nor ends are understood (Alvarez & Barney, 2005; Sarasvathy, 2001), and create teams that can navigate uncertainty (Gibson & Dibble, 2013). Many have concluded that understanding radical change, innovation, and entrepreneurship requires embracing a broader Knightian conception of uncertainty, not just risk.

This special topic forum seeks to stimulate richer theoretical understanding of the consequences of incorporating uncertainty more completely into management and organization research by bringing researchers from different disciplines together to study uncertainty in business and management. Research questions in this theory forum include but are not limited to the following:

- Are these definitions of uncertainty derived from economics and psychology fruitful for theorizing in management?
- When the assumptions of risk are replaced with assumptions of uncertainty in management theories, do we get fundamentally different theories and, thus, different predictions?
- Are there conditions in business and management where the assumption of uncertainty is not fruitful?
- Is uncertainty a boundary condition in management research that has not yet been fully explored?
- Is uncertainty a perceptual or objective phenomenon, and does this matter?
- How does decision making operate under conditions of Knightian uncertainty?
- Is the high performance of individuals, teams, and organizations under conditions of uncertainty simply a manifestation of good luck?
- When the future is Knightian uncertain, what motivates individuals to act?
- Under conditions of uncertainty, how do managers induce employees of a firm to commit to a firm’s purpose or strategy?
- What knowledge, skills, and abilities possessed by individuals or teams allow them to understand and manage uncertainty? How are these enabled, and does addressing uncertainty create other benefits or threats to sustainability? How are processes at micro levels of analysis linked to those at meso and macro levels?
- What tools and frameworks are most helpful to managers dealing with the realities and practicalities of managing under deep uncertainty?
- Have real options theory and scenario planning been useful tools/approaches for managing under deep uncertainty?
- Is the challenge of managing under deep uncertainty qualitatively different for new enterprises versus incumbents?
- How do the properties of a social network influence each member’s perception of uncertainty?
- What are the differences between the way teams (groups), organizations, and alliances perceive and react to uncertainty, and how might these differences affect performance?
- Technological change often increases uncertainty not only for focal organizations but also for members of their ecosystems (customers, competitors, suppliers, complementary, etc.). How might the perception of such uncertainty by a focal organization be influenced by the perception of the uncertainty by each member of its ecosystem? Why and how does that matter?

**TIMELINE AND SUBMISSIONS**

The deadline for submissions is July 1, 2018. Late submissions will not be accepted. In line with *AMR*’s guidelines, submissions must advance management and organization theory and/or the theory development process. This includes developing new theory, significantly challenging current theory, and further incorporating assumptions of uncertainty into our theories of management.

All submissions must be uploaded to the Manuscript Central/Scholar One website (https://mc.manuscriptcentral.com/amr). Guidelines for contributors (http://aom/org/Publications/AMR/Information-for-Contributors.aspx) and the *AMR* Style Guide for Authors must be followed. Submissions that do not adhere to the style guidelines will be returned to the authors. Reviews will follow a double-blind process.

A special topic forum conference will be organized at the University of Pittsburgh on May 17–19, 2018, to invite authors of the most promising submissions. The objective is to publish this special topic forum in the January 2020 issue of *AMR*.

For questions about submissions, contact *AMR*’s managing editor (amr@aom.org). For questions about the content of this STF, contact Sharon Alvarez (salvarez@katz.pitt.edu), Allan Afuah (afuah@umich.edu), Giovanni Gavetti (Giovanni.gavetti@tuck.dartmouth.edu), Cristina Gibson (Cristina.gibson@uwa.edu.au), Joe Porac (jporace@stern.nyu.edu), or David Teece (dteece@thinkbrg.com).
REFERENCES


