

# Addressing Wicked Problems Using New Business Models

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## Summary

Wicked problems such as climate change cannot be addressed by a single economic or government actor. A collaborative approach that seeks a system-level, holistic approach to explaining how firms, government and other actors can convene to solve wicked problems is necessary. My essay seeks to challenge business model researchers to take a more holistic approach by increasing the number of actors in the business model ecosystem to co-create the knowledge necessary to deal with wicked problems.

**Key words:** social responsibility, wicked problems, business models, collaboration

**JEL classification:** M14, H11

Wicked problems like climate change and income inequality are problems that do not have a single outcome and are associated with high uncertainty and are dispersed amongst a host of actors that require the co-creation of knowledge to bridge social, environmental and economic tensions (Batie, 2008; Neugebauer, Figge, & Hahn, 2016; Rittel & Webber, 1973). In fact, potential solutions to wicked problems are based on the judgements of multiple stakeholders. No single actor can solve the problem. Analyzing how a business can address wicked problems without understanding societal values and

stakeholder needs is doomed to fail. A business model approach which emphasizes “a system-level, holistic approach to explaining how firms do business” (Zott, Amit, & Massa, 2011: 1019), on the other hand, has the potential to address a broader constituency. My essay seeks to challenge business model researchers to take a more holistic approach by increasing the number of actors in the business model ecosystem to co-create the knowledge necessary to deal with wicked problems.

A business model is defined as “the design or architecture of the value creation, delivery and capture mechanisms employed” (Teece, 2010: 179). An examination of the 3<sup>rd</sup> International Conference on New Business Models program entitled “New business models with impact: Focused, scalable and international” held June 27-28, 2018 in Sofia Bulgaria suggests that there is a desire and need to expand the value proposition to one that includes societal values and stakeholder needs. That is, a value proposition that goes beyond profit.

The purpose of this essay is to share some ideas on how we can expand business models beyond customers and suppliers. Using research I have written with Michael Barnett and Bryan Husted (Barnett, Henriques, & Husted, 2018), I will argue that there is great opportunity to develop new business models that involve the collaborative experiments needed to bridge the social, environmental and economic tensions inherent in wicked problems (Batie, 2008; Rittel & Webber, 1973).

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## Wicked problems and business models: Can we get there from here?

Albert Einstein once said, “If I were given one hour to save the planet, I would spend 59 minutes defining the problem and one minute resolving it.” In other words, a clearly defined, low uncertainty problem whose solution is based on scientifically based protocols where society deems the outcome to be desirable – also known as a tame problem – is easy to resolve. The most urgent problems facing the world today, however, are wicked problems that require far more effort to define let alone solve. Wicked problems occur within what Rittel and Webber (1973: 160) call an open societal system where problems are ill-defined, dynamically complex, and “rely on elusive political judgment for resolution.” Barnett, Henriques and Husted (2018) in their analysis of wicked versus tame problems<sup>1</sup> argue that business and their stakeholders cannot solve wicked problems such as sustainability or climate change because firms are likely to face low demand for sustainability relative to the many other demands that stakeholders place upon them, and firms are likely to provide even less, given limited ability to meet the demands for sustainability that do arise.

Why is this the case? We argue that self-interested firms serving self-interested stakeholders do not necessarily lead to a setting that is conducive to co-creating the knowledge needed to solve wicked problems such as climate change. We, therefore, turn to the public welfare literature (Coase, 1960; North, 1991) for some insights. An important actor that stakeholder theory has tended to downplay is government (Bosse, Phillips, & Harrison, 2009; Jones et al., 2016). The management literature often highlights the ability of firms to “do well by doing good”

which suggests that if enough firms undertake corporate socially responsible (CSR) activities, societal problems would be solved. But is there enough pressure by stakeholders on firms for this to happen in a persistent and consistent manner to create societal change? We say no and suggest that government intervention is necessary for those involved to “own” problems of the scale and scope of wicked problems (e.g., climate change, poverty) and provide the authority and ability to bring about solutions (Barnett et al., 2018). Governments have many advantages over self-interested firms and stakeholders. Effective governments can reduce uncertainty (North, 1991), which enables firms to compete on a level playing field. Governments can often assume greater risk than firms in innovation and can undertake pilot projects and experiment with possible solutions that firms could never undertake. In fact, risk aversion by the private sector on issues that are of importance to society has often been taken up by governments (Mazzucato, 2015). In her book, Mazzucato (2015) provides numerous examples of public investments that gave rise to the internet, microchips, GPS and the touchscreen. In other words, Apple, Google and Amazon would not exist if not for these public investments.

If money equals power then there is a tendency to believe that large companies such as Apple, who have cash that exceeds the GDPs of two-thirds of the world’s countries (Khanna & Francis, 2016), are more powerful than governments. But with power comes great responsibility. Although the management literature on corporate social responsibility (CSR) has often highlighted the social role and responsibilities of corporations, it has often ignored the real tensions that exist between social and economic goals that corporations face (Crane, Palazzo, Spence, & Matten, 2014). As such, letting firms and its direct stakeholders negotiate potential solutions to wicked problems without accounting for the legitimacy, power and urgency (Mitchell,

<sup>1</sup> A tame problem possesses scientific protocols that can guide solutions, is associated with low uncertainty as to the complex system components and outcomes, tends to be confined to one area, and does not change very much across time (Barnett, Henriques & Husted, 2018).

Agle, & Wood, 1997) of each actor and their respective responsibilities will undoubtedly lead to subpar social outcomes.

As private markets, left to play out their logic of action and distribution exhibit market failures, so too are there government failures. The failure of government to intervene when there is an evident market failure (e.g., impose a tax on a negative externality) also known as passive government failure – and government action that results in the worsening of social outcomes (e.g., corruption) also known as active government failure (Keech, Munger & Simon, 2012) need to be assessed when analyzing wicked problems. A more holistic approach focusing on incentives, information and consensus building is required.

So, Barnett, Henriques and Barnett (2018) argue that there is a role for government especially in situations where firms face strong pressures from both stakeholders and the government to improve their sustainability practices. More specifically, we argue that firms that are highly constrained given their limited resources will seek to collaborate with both government and powerful stakeholders to achieve a suitable solution. With the involvement of government, it becomes possible and perhaps necessary to bear the risk of collaborative experiments that seek to bridge the social, environmental and economic tensions inherent in wicked sustainability problems (Rittel & Webber, 1973; Batie, 2008; Barnett, Henriques & Husted, 2018).

A business model perspective would seek to address how government can convene, coordinate, and coerce the many parties who are part of a business model ecosystem to come together to find meaningful, workable solutions to wicked sustainability problems without succumbing to its dark side (e.g., corruption – active government failure; or inaction – passive government failure) and harming economic prosperity and social wellbeing. In other words, more research is needed to examine collaborative cross-sector

business models for sustainability. How is value created, delivered and captured from cross-sector collaboration shared among actors from business and society? What tensions, dilemmas and paradoxes emerge when managing and operating collaborative business models that seek to address wicked problems? What governance mechanisms are used to regulate the relationships between partners from multiple sectors collaborating on sustainability issues? How do collaborative business models for sustainability differ across sectors and contexts?

Having laid out the challenge, I hope my business model colleagues take it on!

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