‘Programmable Money, Digital Gold’[i] and the Future of Blockchain: Categorizing the Affordances and Expectations of a Promising Technology

By Dr. Beth Kewell, * Dr. Catherine Mulligan, ** Dr. Phil Godsiff, * and Professor Roger Maull. *

* CoDE, The Surrey Business School, University of Surrey, United Kingdom.
** Imperial College Business School, Imperial College London, United Kingdom.

Corresponding Author:

Dr. Beth Kewell

Research Fellow
CoDE, Surrey Business School
University of Surrey
Guildford, GU2 7XH.

e.kewell@surrey.ac.uk

Abstract

Breakthrough moments occur when knowledge of what a technological discovery can do, or be used to accomplish, begins to travel outside of the laboratory or the innovation space, via talk and text. Discourse has a role in both disseminating this information and creating lasting representations of what the technology is capable of achieving. While highly subjective and esoteric in origin, these *promissory modalities* have an objective impact, framing perceptions of an innovation’s potential credibility, acceptability, efficacy and nascent *affordances* within the factual domain (Brown and Michael, 2003; Webster, 2005; Borup, et al., 2006; Pollock, et al., 2007; Pollock and Williams, 2010; Van Lente, 2012). Promissory modalities can have a significant and lasting impact on factual perceptions of affordance at the strategic level, where they are inscribed into decision-making, from the moment the need for a new technology is identified to the buying decisions and implementation strategies that follow (*see for example*: Maier and Fadel, 2009; Withagen and Chemero, 2012; Volkoff and Strong, 2013; Ciavola and Gershenson, 2016). Promissory modalities relay complex messages about technological affordances (Gaver, 1991). Entrepreneurs and business strategists are skilled interpreters of these signs and symbols, which they use to establish a sense of the advantages to be gained from technology adoption. Being able to ‘read’ promise is an essential management competence that involves working within – and between – different affordance related *knowledge categories* (Bowker & Star, 1999). Given the gambles involved in technology adoption, it seems

pertinent to consider how this interpretative task is performed so as to delineate between real promise and hype.

Firms in the service and manufacturing sectors are being encouraged to consider investing in *Distributed Ledgers* as the newest – and most promising – solution to prescient information management challenges and quandaries *(see:* Walport, 2016). In this paper, we consider how industry experts from the services sector (n=5) approached the interpretative task of reading DLT promise, in 2015. Our informants were uniquely positioned to comment on DLT affordances, at a juncture in time that pre-dates much of the subsequent hype surrounding the growth of DLTs and blockchain cryptography. It possible to see, within this sample, evidence of an interpretative process that has since become more widespread, framing investment and adoption decisions among diverse sectors, from finance to diamond trading (Walport, 2016). Our paper shows how this promise was 'read' by experts using different affordance knowledge categories to develop a sense of what could and could not be realistically expected of DLTs. Use of affordance knowledge categories was closely associated with extemporizations of promise (Brown and Michael, 2003; Borup et al., 2006). The two forms of insight (one objective, one subjective) were often pinned or *tacked together* (Star and Griesemer, 1989) - much as in a patchwork cloth. Informants were able to interpret – and closely interrogate - notions of promise using this verbal/textual stitching method. We argue that this practice was pivotal to sensemaking of DLT promise among our interviewees, whose opinions reflect an interpretation of DLT efficacy that has since become more widespread.

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[i]Comment provided by an informant to our study.