9-1-2010

Idea Work: A Pragmatic Perspective on Action-Based Creativity and Innovation in Everyday Work

Wietske Van Osch
University of Amsterdam, w.vanosch@uva.nl

Michel Avital
University of Amsterdam, michel@avital.net

Follow this and additional works at: http://aisel.aisnet.org/sprouts_all

Idea Work: A Pragmatic Perspective on Action-Based Creativity and Innovation in Everyday Work

Wietske Van Osch
University of Amsterdam, Netherlands

Michel Avital
University of Amsterdam, Netherlands

Abstract
Idea work is the process of engaging with ideas in everyday work within task-driven contexts. Anyone who creates, modifies, and uses ideas in the context of everyday work is engaged with idea work. In this paper, we aim to draw attention to how idea work can be used as a fundamental lens to understanding creativity and innovation in organizations. We propose shifting focus from knowledge work to idea work, building on the observation that idea work 1) is distributed across people, artifacts, and environment; 2) is enacted through discursive practices; 3) entails a practical and meaningful engagement with the world; and 4) draws upon and results in embodied artifacts. Backed by a set of action-oriented illustrations of idea work in organizational context, these underpinnings provide insights concerning how creativity and innovation emerge from social interactions between situated people who are collaboratively engaged with embodied artifacts and information systems in the context of everyday work.

Proceedings of the Second Scientific Meeting of

AIS SIGPrag

15 December 2009, Phoenix, AZ, USA

In Conjunction with the

Thirtieth International Conference on Information Systems

Pär J. Ågerfalk, Mark Aakhus and Mikael Lind

SIGPrag
Association for Information Systems

Special Interest Group on Pragmatist IS Research

UPPSALA
UNIVERSITET

RUTGERS

UNIVERSITY COLLEGE
OF BORÅS

Idea Work: A Pragmatic Perspective on Action-Based Creativity and Innovation in Everyday Work

Wietske van Osch
University of Amsterdam
W.vanOsch@uva.nl

Michel Avital
University of Amsterdam
Avital@uva.nl

Abstract

Idea work is the process of engaging with ideas in everyday work within task-driven contexts. Anyone who creates, modifies, and uses ideas in the context of everyday work is engaged with idea work. In this paper, we aim to draw attention to how idea work can be used as a fundamental lens to understanding creativity and innovation in organizations. We propose shifting focus from knowledge work to idea work, building on the observation that idea work 1) is distributed across people, artifacts, and environment; 2) is enacted through discursive practices; 3) entails a practical and meaningful engagement with the world; and 4) draws upon and results in embodied artifacts. Backed by a set of action-oriented illustrations of idea work in organizational context, these underpinnings provide insights concerning how creativity and innovation emerge from social interactions between situated people who are collaboratively engaged with embodied artifacts and information systems in the context of everyday work.

Keywords: Idea work, generative capacity, creativity, innovation, action, practice, discourse

Introduction

Anyone who creates, uses, and modifies ideas in the context of everyday work is engaged in idea work. Idea work has become widespread, particularly in contemporary organizations that thrive on creativity and innovation. A growing part of the labor force creates for a living and almost all professionals are expected to be creative in some fashion. The rise of the creative class (Florida, 2002) has been underscored by the European Commission, which made 2009 the European Year of Creativity and Innovation[1], reflecting the increasing importance and dissemination of idea work across all sectors of the economy and society.

The phrase *idea work* situates creativity and innovation in practices of everyday work. Rather than viewing creativity and innovation as the realm of special people who develop unique artifacts in dedicated places (Leadbeater, 2008), idea work is based on the view that virtually everybody, everywhere, in all sorts of work, is engaged with ideas: hence, idea work. Subsequently, in this paper, we aim to shift the center of attention from the realm of experts to the ground level of everyday practice, or in other words, from knowledge work to idea work.

Idea work nurtures affirmative relationships between people and ideas in a task-driven context. Ideas and aggregates of ideas emerge and develop continuously from the interplay between people, artifacts, and their environment in everyday work. It is through this interplay that people obtain access to existing ideas, negotiate, modify, and challenge ideas, and create new ideas in virtuous cycles of idea work.

---

[1] See http://create2009.europa.eu/

Building on our earlier work (Avital and Van Osch, 2009), this paper aims to provide further insights concerning idea work by exploring its underpinnings as an action-based perspective on creativity in everyday work. Firstly, we argue that idea work is *interactional*, that is, dependent on and *embedded in* relationships and interactions between people, artifacts, and their environment. In contrast to the creativity literature, which mostly still embraces the image of the lone genius and heroic innovator (Hargadon and Bechky, 2006); idea work focuses on the joint actions and interactions of people from all walks of life. Secondly, idea work denotes *practical engagement*, that is, idea work is not an outcome, product or effect of being in the world, it is rather an essential part of it. Thirdly, idea work entails the embodiment of ideas in material artifacts—*embodied artifacts*—including information systems, as tools for evoking, enabling, and encouraging idea work. Fourthly, idea work is based on *discursive practices* for making sense of the world and enacting shared worldviews that inform idea work in everyday practice. Idea work is thus essentially about creating and innovating through language and action, engagement and interaction.

In what follows, we draft a working definition of idea work and then describe briefly its underpinnings to provide a preliminary, pragmatic lens (Goldkuhl and Ågerfalk, 2002; Ågerfalk *et al.*, 2006) for understanding how the activities of people in everyday work evolve around the creation, use, and modification of ideas. Moreover, in the spirit of pragmatism, we offer a set of action-oriented conceptualizations that clarify how idea work takes place in real work situations. We conclude with a discussion of further avenues for research as well as possible implications for the design of inspiring, idea-friendly spaces and tools.

Idea work

We all create, use, and modify ideas at work in various capacities. Idea work relates to how people conceive, reinforce, combine, reject, test, recombine, and develop ideas in a task-driven context (Clegg *et al.*, 2008); that is, it refers to the various ways in which people engage with ideas in their everyday work. Naturally, idea work is closely associated with creativity (Amabile *et al.*, 2005) and innovation (Carlsson, 2004). Although the creativity literature has been dominated by a static perspective that treats creativity as an outcome—i.e. an actual idea or solution—its dynamic characteristics require a process-oriented perspective (Drazin *et al.*, 1999). This observation becomes evident in the context of idea work where *ideas* are simultaneously the main input, content and deliverable (Clegg *et al.*, 2008). Subsequently in this paper, we propose and use the following general working definition: *Idea work is the process of engaging with ideas in the context of everyday work*.

This conceptualization of idea work has three elements. First, it accentuates the process view of idea work, in contrast to the static outcome-oriented perspective that has dominated much of the creativity research. Idea work is primarily about understanding and describing the *process* of engaging with ideas, rather than the mere outcome thereof. Second, the definition highlights the importance of *engaging* with ideas. Engagement denotes an affectively laden, and at times passionate, involvement, which drives processes of idea work. In the course of idea work people engage with each other, artifacts, and the environment. Third, stressing that idea work processes take place in the *context of everyday work* serves multiple purposes: a) it acknowledges the embedded and situated nature of idea work; b) it underscores the inherent link between idea work and everyday practices in organizational settings; c) it focuses the scope of idea work on the particular domain of work-related, e.g. organizational, contexts; and d) it suggests that anyone can be engaged with ideas at all times, hence, that idea work is not confined to particular roles, functions, or 'eureka' moments. Ideas are ubiquitous in organizations and so is idea work.

Idea work is thus associated with the surface level of everyday organizational practices in work-related contexts, and primarily in creative and innovative contexts where ideas constitute the generative core. Although people can engage with ideas, i.e. practice idea work, outside the context of a workplace, we focus on the role of idea work in organizations with the aim of introducing an alternative to the knowledge work perspective. Whereas the latter exclusively reserves creativity and innovation as the realm of expert knowledge workers who specialize in specific subject areas, idea work takes into account anyone—any worker—who engages with ideas for creative, innovative, or problem-solving purposes. Moreover, in contrast with the structured and rational fashion of domain-specific knowledge work, idea work emerges in an organic fashion through a practical engagement and often arises from collaborative efforts in which knowledge from multiple subject areas is combined.

In order to obtain a more holistic understanding of idea work in organizations, we need to unravel its idiosyncrasies and multiplicities as well as the motivations and incentives that drive people while engaging in idea work. In this paper, we briefly explore four underpinnings of idea work:

- *Idea work is interactional and embedded*

- *Idea work is constituted by discursive practices*

- *Idea work entails a practical engagement with the world*

- *Idea work involves the embodiment of ideas in material artifacts*

We further explore these key ideas as follows.

Underpinning 1: Idea Work is Interactional and Embedded

The unit of analysis underlying the study of idea work is a distributed system of people, artifacts—including information systems—and the environment (Hutchins, 1991, 1995; Perry, 2003). Idea work thus involves the way people engage with artifacts and the environment through their everyday work practices and actions. Ideas are meaning-bounded emergent phenomena which arise, develop, and disappear in the course of a complex interplay between people, artifacts, and their environmental context. Hence, ideas reside inherently within the distributed system as a whole and cannot exist as single isolated components if somehow abstracted from the larger system.

The aggregates of ideas with which people engage are not bounded by the self, but inherently embedded in all external pathways along which ideas travel (Bateson, 1972). Therefore, ideas transcend boundaries of the self, and it is only when shared with others, and contested by others, that ideas actually come to life (Leadbeater, 2008). Consequently, idea work can be regarded as transcendental and distributed. Hence, building on a social constructionist view and in contrast to the conventional view of creativity, the creation and modification of ideas is by default an innate group process (Hargadon and Bechky, 2006).

Building on its systemic characterization, we can identify three dimensions of distribution that take place at idea work. Firstly, idea work is spread among the members of a social collective, which we refer to as the *social dimension of distributed cognition*. Secondly, idea work involves a certain degree of coordination among people, artifacts, and environment, which we refer to as the *spatial dimension*. 'Spatial' here refers to the dispersion of interdependent actors throughout the system. Thirdly, idea work is also distributed through time—ideas and configurations of ideas at one point in time are influenced or transformed by earlier instances of idea (Bateson, 1972), which we refer to as the *temporal dimension*. In all, idea work is inherently distributed across boundaries.

Underpinning 2: Idea Work is constituted by Discursive Practices

Language is innately tied to people's experience in the world and their relationship to that world. Given that ideas emerge from interactions among people and are translated and communicated across boundaries of all sorts, processes of idea work essentially build upon and are influenced by the prevailing discursive practices. Ideas are produced and understood through language and, as aforementioned, take shape and are forged when shared with others. Therefore, in the course of idea work, language is the means through which people make sense of the world around them as they engage with others, artifacts, and the environment through a set of discursive practices (Avital et al, 2009).

Treating idea work as a class of discursive practices provides additional insight. It stresses that idea work occurs through meaningful behaviors and actions of people in concrete situations. Thereby, idea work emerges from, and actively relates to, constructed social realities, and hence involves the negotiation and challenging of meaning through interaction. It is within and through the collective and situated construction of these social realities and meanings (Wenger, 1998) that ideas emerge and vanish, and cycles of idea work evolve and dissolve.

Furthermore, idea work is not solely based on an interpretation and understanding of the world in terms of what was and what is, but also in terms of what could or what may be, that is, in terms of potentialities and possibilities. In other words, idea work has a positive focus on desired futures at the expense of a preoccupation with threats and problems. Moreover, while we can certainly draw on the past and the present, concentrating on a desired future has a liberating and inspiring effect on those who engage in idea work. A focus on a desired future is invigorating. It is from this positive orientation toward the future and the co-creation of wishful images of the future, that the inspirational and imaginative power of idea work emerges, and subsequently provides the impetus for creative and innovative processes.

Underpinning 3: Idea Work entails Practical Engagement

Ideas are not the mere outcome product of a collective, they are *part* thereof and it is in people's actions and interactions that these ideas are present. Our sensory, perceptual, creative and cognitive abilities for engaging in idea work are inextricably linked to our physical being (Avital and Van Osch, 2009) and its situatedness and embeddedness in a dynamic socio-material environment (Quek, 2006), which is actively and interactively constructed (Dourish, 2001). It is through these practical involvements that the world is disclosed to us and that our ideas gain shape and evolve.

Understanding idea work thus requires paying attention to the work practices, that is, to the actual set of activities, behaviors and actions that people pursue when they are at the workplace and engage with ideas (Cook and Brown, 1999) as it occurs in a particular task-driven context. These activities or practices are negotiated and situated (Lave, 1988, Star, 1995). Hence, in order to understand idea work, we ought to attend to the inter-subjectivity as well as the material, social, and cognitive complexity that characterizes idea work as these materialize and evolve in the context of everyday work. In short, the practice of idea work encompasses both meaning and action. It entails how people experience and enact the world, and subsequently engage with it through human interactions and the use of information systems (Dourish, 2004).

Underpinning 4: Idea Work is Embodied in Artifacts

It is important to emphasize that the ideas that people engage with in everyday work are often embodied in things—i.e. have a material form (Dourish, 2001). A discussion of idea work therefore has to address the materiality of ideas and how artifacts may enable or constrain idea work.

Materiality and idea work are related to one another in three ways. First of all, material artifacts embody and reflect the aggregated set of ideas that have been used to forge, shape and reshape them to date. Thereby, artifacts are a primary source of information concerning work practices that involved those artifacts and the normative values that influence their creations and use. Consequently, artifacts are a fundamental source of information and inspiration during the design and development of new related products and services. Second, people often draw upon and engage with material tools and technologies to facilitate and enable the process of creating new ideas. Third, the outcome of idea work is often materialized and embodied in artifacts of all sorts. Idea work thus potentially gives rise to new artifacts that in turn become the fertile soil for new cycles of creativity and innovation.

Furthermore, it is the embodiment of abstract ideas within material artifacts that enables the traveling of ideas through time and space. However, when ideas travel from one milieu to another, people tend to modify them to some extent while reappropriating them for their local context. As these artifacts travel across places, the ideas embodied in them are also translated and adapted to local environments; some are even lost in translation (Czarniawska & Sévon, 2005). Nonetheless, irrespective of the situated translations, the introduction and application of new ideas within new environments inform and transform local practices (Solli *et al*, 2005), potentially closing a full cycle and giving rise to new ways of doing and engaging with idea work.

Examples of Idea Work

Instances of idea work within task-driven contexts of creativity and innovation include practices such as: idea linking, idea contextualizing, idea refining, and idea testing (Birkinshaw *et al* 2008). *Idea linking* occurs when individuals in the organization make connections between new and existing ideas, emerging inside or outside the organization[2] (Ibidem:835). However, idea linking can also refer to a process of linking the multiple, potentially conflicting, ideas of a group of individuals engaging in idea work. *Idea contextualizing* entails a back-and-forth interaction between issues that have to be addressed and a set of possible solutions. *Idea refining* is a form of disciplined imagination (Weick 1989), a process of hypothetical trial and error, related to conceptualizing the implications of a particular idea in terms of how it might work in practice or in other contextual settings, with the aim of sharpening the new idea (Birkinshaw *et al* 2008:835). Finally, *idea testing* involves the implementation of the

---

[2] Idea linking is therefore closely related to the concept of knowledge brokering (Hargadon, 2003); a process of linking new problems to old solutions developed in other domains

idea in order to enhance the underlying rationale. This process of idea testing can potentially lead to the construction, testing, and reification (Weick 2003) of other ideas, hence constituting a virtuous cycle of idea work.

Furthermore, we list several additional instantiations of idea work, as follows: *idea generation*, *idea sharing, idea negotiation, idea traveling*, and *idea realization*. First, *idea generation* occurs when individuals or groups of individuals come up with new ideas through activities that support individual or collective creativity, imagination or improvisation. This process is closely related to idea linking in which new ideas stem from an explicit association with existing ideas. Second, *idea sharing* is about communicating ideas to others in order to provoke a constructive dialogue or a dialectical negotiation of ideas with the aim of improving or realizing ideas. Again, idea linking is closely related to the idea sharing because the two often co-exist and sharing is often a prerequisite of identifying new links between seemingly unrelated ideas. Third, when ideas are shared with other people, they become subject to debate and deliberation, which we refer to as *idea negotiation*. Idea negotiation is the attempt to resolve disagreements over the nature, purpose, or application of an idea in order to decide on a certain course of actions that is considered to be desirable to everyone involved. Fourth, the process of *idea traveling*, which we adopt from Czarniawska & Sévon (2005), refers to the observation that when an idea spreads from one context to another, people change, add, and modify the idea in order to fit it to the new milieu. Idea traveling is thus inherently an act of idea modification and appropriation. Last but not least, *idea realization* is about the embedding of ideas in products or processes with immediate applications; that is, the implementation of ideas in real-world situations. In contrast to idea testing, idea realization is not about the implementation of ideas with the aim of enhancing the underlying rationale, but rather with the goal of serving the purpose or meeting the demand for which it was developed in the first place.

Although the above set of instantiations of idea work might be inconclusive, its main purpose here is highlighting how idea work prevails in everyday work.

Discussion and Conclusion

Idea work, the process of engaging with ideas in the context of everyday work, forms the core of creative activities and subsequent innovation. To a large extent, idea work is about the ongoing negotiation and modification of ideas in the course of routine interactions between people, artifacts, and the environment. Through the conceptualization of idea work, we attempted to embed the somewhat static notion of creativity and innovation into an action-based perspective that emphasizes the distributed, practice-based, embodied, and linguistic nature of idea work in organizations. We aimed to illustrate thereby the inherently communicative and collaborative nature of idea work, as it takes place in distributed systems such as today's organizations and their environment. Idea work provides a pragmatic lens for studying how people interact and enact their ideas creatively, and in surprising ways.

These observations hold certain implications for future research into idea work in task-driven contexts. Given that ideas are ubiquitous in organizations, a thorough, empirically-based understanding of idea work can provide relevant insights into the many aspects of organizational life relating to different realms of collaboration, problem solving, learning, creativity and innovation (Avital and Van Osch, 2009). Moreover, given that ideas reside in a distributed system where people, artifacts, and the environment are in continuous interaction, we urge future researcher to be attentive to the dynamic nature of idea work, its embeddedness and situatedness in organizational contexts, and its inherent link to materiality, discourse and language. In all, idea work thus provides a refreshed pragmatic lens for looking at creative and innovative work in organizations, not as the realm of experts, but as a complex routine activity encompassing the ideas of anyone, anywhere, anytime.

In addition to providing further insights for researchers, a thorough study of idea work can guide systems designers who aim to enhance creative work, unstructured syntheses, serendipitous discoveries, and any other forms of computer-aided tasks that involve unexplored outcomes, expect fresh design alternatives, or aim at boundary spanning results. In summary, the action-based reflection offered here can provide insights both to those who wish to study creativity and innovation in everyday practices of work and to those who want to design environments and tools, which are conducive to idea work processes.

References

Agerfalk, P., Goldkuhl, G. Fitzgerald, B. and Bannon, L. (2006). "Reflecting on action in Language, Organizations and Information Systems," *European Journal of Information Systems,* 15(1), pp. 4-8.

Amabile, T.M., Barsade, S.G., Mueller, J.S., and Staw, B.M. (2005). 'Affect and creativity at work'. *Administrative Science Quarterly,* 50, pp. 367-403.

Avital, M., Boland, R.J. and Lyytinen, K. (2009) "Introduction to Designing Information and Organizations with a Positive Lens," *Information and Organizations*, 19(3), pp. 153-161.

Avital, M., and Van Osch, W. (2009). The Generative Archetypes of Idea Work. *Paper presented at the 25th EGOS Colloquium, Barcelona, Spain, 2009.*

Bateson, G. (1972). *Steps to an ecology of mind*. New York: Ballantine.

Birkinshaw, J., Hamel, G., & Mol, M. J. (2008). Management Innovation. *Academy of Management Review*, 33(4), pp. 825 - 845.

Carlsson, B. (2004). 'The digital economy: What is new and what is not?'. *Structural change and economic dynamics* 15, pp. 245-264.

Clegg, S., Antonacopoulou, E., and Carlsen, A. (2008). Call for Papers. *25th EGOS Colloquium, Barcelona, 2009*.

Cook, S.D.N., and Brown J.S. (1999). 'Bridging epistemologies: The generative dance between organizational knowledge and organizational knowing'. *Organization Science* 10, pp. 381-400.

Czarniawska, B., and Sevon, G. (eds.) (2005). *Global ideas: how ideas, objects, and practices travel in the global economy*. Frederiksberg, Denmark: Liber and Copenhagen Business School Press.

Dourish, P. (2001). *Where the action is: The foundations of embodied Interaction*. Cambridge: MIT Press.

Dourish, P. (2004). 'What we talk about when we talk about context'. *Personal Ubiquitous Computing*, 8, pp. 19-30.

Drazin, R., Glynn, M.A., and Kazanjian, R.K. (1999). 'Multilevel theorizing about creativity in organizations: A sensemaking perspective'. *Academy of Management Review* 24, pp. 286-307.

Florida, R. (2002). *The rise of the creative class: And how it's transforming work, leisure, community and everyday life*. New York: Basic Books.

Goldkuhl, G., and Ågerfalk, P. J. (2002). Actability: A way to understand information systems pragmatics. In K. Liu, R. J. Clarke, P. B. Andersen, and R. K. Stamper (Eds.), *Coordination and communication using signs: Studies in organisational semiotics 2,* Boston: Kluwer Academic Publishers, pp. 85-113.

Hargadon, A.B., and Bechky, B.A. (2006). 'When collections of creatives become creative collectives: A field study of problem solving at work'. *Organization Science* 17(4), pp: 484.

Hutchins, E. (1991) The social organization of distributed cognition, in L.B. Resnick, J.M. Levine, and S.D. Teasley (Eds.). *Perspectives on Socially Shared Cognition*, Washington, DC: American Psychological Association, pp. 283-307

Hutchins, E. (1995) *Cognition in the Wild*. MIT Press, Cambridge, MA.

Lave, J. (1988). *Cognition in practice.* Boston, MA: Cambridge.

Leadbeater, C. (2008) *We-think: Mass innovation, not mass production: The Power of Mass Creativity.* London: Profile.

Perry, M., (2003) Distributed cognition, in J.M. Carroll (Ed.). *HCI Models, Theories, and Frameworks: Toward an Interdisciplinary Science*, Morgan Kaufmann Publishers, San Francisco.

Quek, F. (2006) Embodiment and Multimodality. *Proceedings of the 8th international conference on Multimodal interfaces*, Banff, Alberta, Canada, pp. 388-390.

Solli, R., Demediuk, P., and Sims, R. (2005). The namesake: On best value and other reformmarks. In B. Czarniawska & G. Sevon (Eds.), Global Ideas. Copenhagen: Liber – Copenhagen Business School Press.

Star, S.L. (Ed.) (1995). *The Cultures of Computing.* Oxford: Blackwell Publishing

Weick, K.E. (1989). Theory Construction as Disciplined Imagination. *Academy of Management Review*, 14(4), pp. 516-531.

Weick, K.E. (2003). Enacting an environment: the infrastructure of organizing. In *Debating Organization*. Westwood, R. and S. Clegg (Eds.), pp. 184-194. Malden: Blackwell Publishers.

Wenger, E. (1998). *Communities of practice: learning, meaning, and identity*. Cambridge, UK: Cambridge University Press.