New Work Arrangements in the Pursuit of Organizational Innovation

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Introduction

The broader theme of this conference concerns evident changes in work and career practices and the profound ways these may be transforming our social and economic ways. For this talk, I will focus on changes in the work arrangements between workers in the economy and the organizations that employ them, and on the affect these new arrangements can have on organizations' ability to innovate.

In modern economic times, salary work has served as the traditional arrangement. This has not been without advantage for workers and organizations. The model offers explicit roles, consistent reporting relationships, stable work hours, predictable levels of income, and long-term career ladders. Yet as we look at some of the new and dynamic organizations in our economy today, new understandings and work arrangements are taking hold.

For example, roles are fluid and changing in the context of a chaotic technology startup. Reporting relationships become obsolete in an open-source software effort conducted by a team of part-time volunteers who have never met face-to-face. Where salaried workers once logged stable daytime hours, a driver for the ride-sharing service Über will earn money whenever he or she likes, based on personal convenience and location. Designers who may once have worked as salaried workers crafting jewelry, accessories and fashions consistent with their employer's brand strategy, now independently choosing not only what they will make, but also the quality level and the price as they place products for sale on Etsy, the craft marketplace. And where a respectable job in a bank was most highly sought after by the sons and daughters of our society's elite, we now see resumes aimed at entry-level positions in startups, sent in defiance of a logic of long-term career progression, but rather showing a desire for intense project-based work with a team of people who share one's personal values.

Important questions for the new work arrangements

One question we can ask is whether these changes being driven as a necessary byproduct of adverse economic conditions that make traditionally desirable jobs more scarce and that force workers to employ alternative arrangements as insurance against job insecurity or underemployment. Or is it possible that these changes are being driven by generational changes in worker attitudes, a change that might rightfully be portrayed as a desire for freedom or emancipation in today's workers.

A second question asks after the likely effects on *innovation* of the traditional and the newly changing arrangements. If you believe (and many do) that innovation is the tool that we can use for improving the conditions of humans and generally making the world a better place, we must weigh the potential effects these arrangements will have on innovation. Given the global economic reach of the transformations, it will be important to know whether the old forms or the new will be the source of the most important innovations for current and future societies.

Before going too much farther in this (or any) discussion of innovation, it is important to be clear about the specific nature of the innovation being examined. For the purposes of this discussion I will use the term *radical innovation* to describe the kind of industry creating or industry-disrupting innovations we currently see being driven by firms like Über, Air-BnB, or even Google. On the other hand, I use the term *adaptive innovation* to refer to the evolutionary improvements that might be exemplified by the small but ever-increasing fuel efficiency of automobiles, or the minor but cumulatively meaningful changes that Apple or Samsung make across subsequent generations of the mobile phones they sell. The distinction between radical- and adaptive- innovation is important for my discussion because, as I will argue, while both new and traditional work arrangements can support *innovation*, the pursuit of one particular kind of innovation can require arrangements that are antithetical to those that might support innovation of the other kind.

In discussing innovation and the characteristic features of organizations that most obviously *afford* (support) or *constrain* (obstruct) it, I will use a model of organizational innovation that I developed in prior work. The model proposes that innovation capability in organizations is best determined by reference to its *strategy* (the organization's mission and worker's understanding of how they will accomplish it), its *structure* (the mechanisms for coordination and control in the organization) and its *resources* (the assets and other forms of capital that an organization has control over and uses to achieve its mission). In the next three sections I will explore each of these perspectives in turn, focusing specifically on the implications that work arrangements, both new and old, are likely to have on the amount and type of innovation pursued.

1. Organization Strategy, Innovation, and the New Goals of Work

We may assume that organizations will have an intention of pursuing innovation as a part of their mission, however this assumption is not always supported by observations of the actual behavior of many traditional organizations. Most obvious are civic organizations like governments, organized religions, and many quasi-religious ones (like universities) that enact strategies that reify the status quo. While there are many valid reasons for this (for example, preserving power, protecting the vulnerable, keeping a stable society), the end result is set of intentional behaviors that are changed as little as necessary for the organizations to remain fit within their strategic environment. We also see this behavior in other monopolistic organizations like utilities or ones that work in the markets with highly commoditized products and services.

Another facet of traditional organizations, is that while their strategies may be directed at missions and goals that many workers care for, the dominant power in determining how the strategy is implemented is dictated by those at the top of the organization where the power of stakeholders like executive managers, stockholders and boards is highest. This can lead to a question of whose goals are actually being furthered by the organization and to a distancing of the vision that may have driven a person to join the organization in the first place. This need not be a nefarious or cynical movement away from the mission; simply because of the sheer size of the organization, more divergent goals will result in a lowest common denominator calculation to maintain fit.

When innovation is pursued in these types of organizations, it will tend to be *adaptive* innovation that is narrowly focused on improving the efficiency, productivity, or stability of the organization itself, and not on the needs or desires of the market. There are numerous instances of organizations inventing and then ignoring or killing potential innovations because of the disruption they might cause to the routine functioning of their organizations (e.g., IBM, Xerox PARC, Kodak). In other words, the organizations innovate simply to survive and not to change the market or the world. The result is that these organizations are quite good at the kind of innovation that fixes current needs and does so with minimal disruption.

This is quite different than how we might conceptualize strategy in new organizations. The new arrangements, to some extent, make is possible to open up a negotiation about what is the strategy, that is about what we will do together and how will we do it. The participation of individuals in the open-source software movement can serve as an instructive example. While the open-source movement has sometimes been characterized as a political movement that militates against traditional forms of intellectual property generation and protection, we can also view it as an collective assertion of control by individuals and small groups over the both the strategies of the products they develop, and over the long-term vision of the common platforms and tools they use to participate in the economy.

As a developer in an open-source project, you enjoy control over both the means and the ends of your own productive capacity. You choose what you will work on and what it will do. With only a little stretch, it should be evident why a person will be inclined to believe that the important work they are doing now on problems that matter to them (together with equally idealistic and like-minded people) will have a larger payoff in the long run than the work arrangements offered by traditional companies in the current knowledge worker economy. As I suggested earlier, these companies may offer only vague strategies with innovative activity focused on organizational survival. I will not be at all surprised to find that the pursuit of *interesting* work might be sufficient to drive highly educated and skilled workers of the millennial generation towards new forms of engagement with the economy.

In one part of the answer to the questions set out at the beginning of the talk, the focus of traditional organizations on self-preservation through incremental adaptive innovation may well be driven by our current adverse economic context. But this in term forces new organizations to seek new arrangements and disruptive strategic approaches if they are to have participation in the economic system. Thus it is both the adverse economic context and the desire for workers to be able to participate in the strategy-making in their organizations that is driving the current success of alternative work arrangements.

2. Organization Structure, Innovation, and New Work Arrangements

Another important type of change in the alternative work arrangements are the structural changes in taking place in the mechanisms for coordination and control in the organization. It is important to note that the implicit goal of the act of organizing is to be able to arrange things (primarily people) into sets of relationships that can lead to a desired outcome. Usually, as a corollary to the argument of the preceding section, that desired outcome is an output with a minimum of variance, and this has significant implications for innovation in an organization.

Traditional organizations structure work arrangements in ways designed to maintain control over their internal systems in the service of efficiency, routine output, and specified forms of quality. This requires careful specification of worker roles, worker behaviors, and worker relationships. When successfully specified and properly executed organizations can see the efficient achievement of desired outputs. Though all workers may be rewarded monetarily for their participation in an organization, a key practice is to promote and provide upward mobility to those workers who thrive within the system, thus insuring stability and preservation of the enacted values of the organization.

The specification of the roles, behaviors and relationships can begin long before a worker enters the organization. Entry into most positions in an organization requires formal (or informal) certifications that certify suitability for a required role. For example, you cannot work as the corporate lawyer without having gone to law school. While this of course makes sense, there are implications for the pursuit of innovation. And informally, you may be considered ineligible for a particular promotion if it is not deemed to be within your “career path,” even when the existence of such a path is not explicitly acknowledged.

Likewise, organizations must specify and control the relationships among workers if they are to be able to participate collectively in the organization’s actions in a productive way. This coordination can be difficult to achieve, especially in large organizations, leading organizations to rely on dividing organizations first into divisional groupings, and then into hierarchical groupings as well. Thus all the R&D people are in one part of the organization, arrayed from top to bottom, while all the sales people reside in a different part, also arrayed from top to bottom. When it works, this can be a powerful and efficient system, and this kind of coordination ability among large organizations is the basis for the success of our economic system.

While good at amassing power, however, these arrangements lead to an approach to innovation that is by and large incremental. By pre-specifying the desired content and behaviors required for organizational roles, workers must be “pre-trained” before entering the system. This means that they will have to rely on a-priori understandings of the system and its workings, these necessarily being lagged or outdated in the time between being trained and taking the role.

When, because of market or environmental shifts, changes in roles are desired, these can be done only incrementally since an entire redesign of the system may be necessary when radical changes become necessary to individual roles. And without good communication between functions and across levels in the organization, information processing is hampered thus decreasing the possibility of detecting a need for a radical change in the organization and reducing the potential for a radical response.

With alternative work arrangements there are potentially significant *structural* differences, again with implications for the kinds of innovation that might be successfully pursued. For example the concept of the organizational *role* for a worker changes from a system where roles and the relationships among them are formalized, pre-defined and pre-arranged, and moves to a system that relies on potentially radical movement among the parts.

This allowance for significant real-time redefinition of roles makes most obvious sense in a startup environment where an organization's fit with the environment has not been achieved and where resources are in short supply. In this case worker-role fluidity and willingness to undergo radical reorganization may be the cost of survival. Relationships based on trust and social network connection then become the structural currency of the organization. But it is not just startups that may benefit from this form. In Google, for example, a company of tens of thousands of workers, the average project team size is less than 5 people. Instead of an elaborate system of controls, surveillance and supervision, workers are trusted to form teams around projects that interest them and that will gain them the respect of others around them. Working on a project that closes is less a failure than it is an opportunity to work a project with more potential.

A move away from static definition of roles also frees workers the credentialing and certification bias of traditional forms of education, training, and skills development.

The offer of alternative ways of engaging productively in the economy may be especially important for individuals without credentials who are being left behind for lack of access to the traditional gatekeeper organizations like universities, trade-schools, and job training programs. And rather than suffering from the presumed adverse performance that individuals untrained in the traditional ways might bring, new organizations may in fact benefit when a job is performed in a new and innovative way, perhaps one that violates entrenched norms, guidelines, and curricular dogmas, but that also radically improves performance and outcomes.

Whereas traditional structural approaches act to centralize control over them, alternative arrangements allow workers a choice over *when* they work, *where* they work and *whom* they work with. Based on the success of so many of these organizations, we must assume that there is a significant population of workers who value control over the lifestyle effects of work, even when the alternative arrangement may return less economic value. Like crafters on Etsy and flea market sellers on eBay, Über drivers are a case in point. They control the timing and amount of their work hours based on personal considerations (and not the needs of the system), they choose where they will work (and where not), and they decide who they will or will not provide service for. Traditional taxi workers, like most workers, rarely have had these liberties or this kind of control over the conditions of their work, most likely because the quasi-monopoly status of their organizations has not found it necessary to innovate in the radical ways that would provide it.

Returning to the specific questions we are addressing in this session, we observe that the structural practices (both inside organizations and in most traditional industries) seek to reduce variance in organizational performance in ways we can characterize as adaptive and incremental. While these outcomes can be desirable they are most often pursued through control over workers. This takes the form of control over what time they come up to work, over how long they stay, over the content of that work while they are there, over their relationships to those with whom they do the work, and over the types of the rewards they are to get from their work.

While an adverse economic environment may be partly to blame for this state of affairs, we should also recognize that the very reasonable wish of individuals to do the work they want, when they want, where they want, and with whom they want can serve as powerful a motivation to seek alternatives among a new class of workers.

3. Organization Resources, Innovation, and New Forms of Capital

The third perspective on changing organizational arrangement focuses on the resources that organizations control and use to achieve their goals. This traditionally this refers to the economic capital that organizations use to create value. But I will also suggest that other resources, often deployed in new ways, may be at the center of alternative work arrangements.

Traditional arrangements put capital front and center of our societies economic activities. Financial markets are the place where organizations can seek monetary investment to support their plans for innovation and growth. Yet the markets can also be a source of the significant inertia that acts to slow or kill innovation. Investors are rightfully careful about the risks they are willing to take and so place stringent demands on returns from the organizations that would borrow their money. However this can (and does) drive organizations to ask for money to invest in only those new products, projects, or markets where they know with absolute certainty that the investment will pay. This dynamic creates an environment where incremental innovation, the kind where the value of improvements can be known in advance is far preferable over radical innovation, which may over-deliver on returns but that has too high a risk of failure. This leaves both the demand and the opportunity for new competitors, those with new types of resources and different models of risk to upend existing industries and create new markets. It is no wonder that Apple sits on billions of dollars allowing itself the opportunity of innovating on its own terms.

In his model of disruptive technologies, Harvard Professor Clayton Christensen argues that new organizations entering existing markets succeed only to the extent that they bring novel models of performance and radically different cost structures to bear in those markets. Had Über, for example, tried to compete directly head-to-head with traditional taxi companies, it would likely have been a poor showing. Instead, their approach allowed them to enter the market with fewer assets than any transportation company known before. By not owning the cars, they compete without incurring the cost of purchasing cars, licensing them, providing fuel for them, doing maintenance on, or even parking them –which in some urban areas might be a significant cost. Instead, the driver supplies the two primary assets, an underutilized vehicle and an underemployed worker, while Über's resource investment comes in the form of a customer list and a transaction support system.

Airbnb is another organization of this same type. They connect travelers with "hosts," *i.e.,* people with an unused bedroom or couch that travelers can use as cheap overnight hotels. A fearsome new entrant in the hotel industry, they have been able to expand to over 190 countries with essentially no investment in real estate, buildings, or service staff.

It is interesting to see how little monetary capital investment was required for these companies to enter these traditionally asset-heavy industries. But what I find especially instructive for our discussion here is the equally miniscule investment that is required on the part of a worker. By merely downloading an app, they are given entry into what are traditionally protected professions such as inn keeping or taxi driving. This is no small achievement for the worker given that operating in the traditional model, for example of a taxi driver, may require significant investments in education, special licensing and certification, and insurance, this in addition to willing conformance with the traditional organizational control arrangements as I described above.

When looking inside organizations, we might assume that in that controlled resources are protected from the market dynamics, and that they are readily deployed to the innovation projects being pursued within. While this might be the case, there is a distinct bias towards investments in incremental innovation projects and against those that might be considered in pursuit of radical innovation. Internal policies that govern the distribution and use of resources often require the development of budgets with projected monetary return targets. As well, risk calculations highlight the opportunity costs of investments in innovation. Thus, even if an innovation doesn't fail, it may be deemed a loss if that same investment might have been made into an alternative investment with a higher return. This creates an environment where innovation, an inherently risky activity, is made all the more risky because of the organizational repercussions workers face if things don't go exactly according to plan.

On the other hand, alternative work arrangements of the kind we are discussing take a different approach to the question of resources. First, as in the example of AirBnB and Über, the risk to the organization is minimal, as they do not own the capital asset. As well the risk to the worker is small as they are simply trying to get returns from an under-utilized asset. Another arrangement creates value by harnessing behavior that workers might do anyway. As such we have all served as beta-testers for early versions of software. It used to be that software companies hired beta testers to do that work. Now, in exchange for early access to the software applications, we happily agree to do that work.

Similarly, the model of charging money for a service has been abandoned by some of the most successful new-arrangement organizations. Facebook, to name but one, provides very sophisticated software to any one with an Internet or mobile connection and a desire to use it. Rather than ask for money as would be the case in traditional arrangements, you now pay in the form of the data you generate as you go perform your activities online. As a resource, data is more carefully used and distributed than even money inside the organization. For example compare the risky acquisitions the company makes with its money to the fierce protectiveness of its mailing lists and user data.

Once again, returning to the questions asked at the outset of the discussion, I am proposing that it is the traditional economic practices as engaged in by financial markets and the organizations they fund that limit innovation to the realm of the adaptive and incremental. In light of these practices, radical innovation can be spurred by new arrangements that take the shape as new forms of capital (e.g., personal data, social networks) and new sources of capital (worker-provided assets, crowd-sourcing).

Summary

I have argued that the new work arrangements are a result both of the current economic conditions and the desire for freedom and worker emancipation. I have also proposed that while both new and traditional work arrangements in organizations can support novel, valued, and implemented improvements (*i.e.*, innovation), the specific type of innovation (adaptive or radical) that is best supported will vary.

It is well that both kinds of innovation are required for a long-term healthy economic system, where creative improvement and creative destruction operate in reinforcing cycles. So, as participation in the radically new work arrangements increases, specifically because these improve the economic conditions and emancipation of new economy workers, these innovations become status quo, eventually giving way to the kinds of continuous and incremental improvements that we currently see.

While this paints a rosy picture, there remains the implicit danger that the virtuous cycle of organizational innovation will be slowed or derailed. The most likely sources of obstruction are the powerful incumbent interests that currently benefit from the traditional arrangements, and that are threatened by the radical innovations described earlier. At the same time there is the complimentary danger that we accept these radical changes to work arrangements, wholesale and uncritically, and that in the process we lose out on the important value created by traditional organizations and the incremental innovations they support.

In closing I offer that we must not only look at organizational innovation, but that we must as well remain conscious of and engaged in the processes of societal innovation –that is the process of collectively updating our ideals, values, and the forms of social controls through which we enforce them. Only by understanding the societal ripple effects of the organizational changes we see can we gain insight about and possible control over the both the positive and adverse effects they are likely to have.