10 strategies for a workable future

A call-to-action from the Workable Futures Initiative at Institute for the Future
ABOUT THIS REPORT

On October 5-6, 2015, more than 60 thought leaders in the emerging on-demand economy gathered at IFTF’s Gallery for the Future in Palo Alto to create a shared vision of a world of Positive Platforms for work—platforms that enable good, dignified, and sustainable livelihoods for workers.

Platform designers, entrepreneurs, journalists, researchers, educators, venture investors, representatives of worker unions and coalitions, and government leaders all came together to discuss the technical, social, economic, and policy issues that are shaping the rapidly evolving ecosystems of work in a platform-based world. With their voices and diverse perspectives adding to IFTF’s own research, we have identified ten strategies for a workable future—ten strategies that address the compelling needs of all workers, while also recognizing the new opportunities inherent in a more distributed system of production at scales previously unknown to humanity. This report is a call-to-action for others to join the conversation.

While inspired by the workshop, the views expressed in this report do not necessarily represent those of the individual participants, nor do the participants necessarily endorse the conclusions.

ABOUT THE INSTITUTE FOR THE FUTURE

The Institute for the Future (IFTF) is an independent, nonprofit strategic research group with more than 47 years of forecasting experience. The core of our work is identifying emerging discontinuities that will transform global society and the global marketplace. We provide organizations with insights into business strategy, design process, innovation, and social dilemmas. Our research spans a broad territory of deeply transformative trends, from health and health care to technology, the workplace, and human identity. IFTF is based in Palo Alto, California.

iftf.org/workablefutures
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A social, economic, and technological revolution is changing the way we work. This revolution stretches far beyond disruptive innovations in taxi services like Uber or freelancing platforms like UpWork. The way we create value is changing. Whether it’s building parts for electrical vehicles or building out the infrastructure for an Internet of Things, whether it’s providing care to aging parents or combating extreme weather events, we’re reinventing work and the workforce.

In the United States, we’ve traditionally thought of the worker in a few well-defined categories. Full-time employees have been the backbone of the economy with entrepreneurs, small businesses, and freelancers or part-timers filling out the overall landscape. Everything from our tax codes to our definition of unemployment has taken these categories as the starting place for policy—policy that sometimes protects and sometimes punishes individual workers. The current debate over whether platform workers are W2 or 1099 employees is trapped in this way of thinking about workers, this way of classifying them.

Today, these classifications no longer describe reality.² As the percentage of freelancers expands to 40% or 50% of the workforce over the next decade, as adjunct professors at major universities—formerly solid middle-class workers—join the Uber workforce at night to make ends meet, as artists sign up as “taskers” to support their art, workers are making choices that have little to do with the old distinctions between employee and part-timer or between blue-collar and white-collar.

To design our technologies, our economies, and our policies to meet the needs of a future workforce, we must first jettison our old models of the workforce. We need to recognize that we have the means to organize for more equality and more security and to accomplish more—far more—as a society than simply bringing home a paycheck.

One starting place is the platform. It doesn’t matter whether today’s on-demand platforms are the cause of this turmoil in the workforce or a powerful adaptation to a labor economy that is no longer working for the majority of the population. For vast numbers of people, these platforms will be the new interface to work. And the way we design and build this interface, the way we design the tools and craft the policies that govern them, may mean the difference between a healthy, vital humanity and one that struggles not just to make a living but to maintain a sustainable planet.
call to action

10 strategies for a workable future

Often, when we think of digital platforms for work, we think of the nuts and bolts: the user interfaces, the APIs we’ll create and the ones we’ll plug into, the algorithms that will sometimes make our platforms smarter than any individual human, and of course, the entire infrastructure of data storage and communication in the cloud. These are necessary components of positive platforms, but we need to think beyond the technical and business model innovations that are driving this to a revolution in the workplace to build truly positive platforms.

We need to think of the upstream and downstream implications of individual features, rules and policies of platforms and the combined functionality they offer. We need to understand how information will flow not only from one platform to another but also through other socio-economic structures like corporate and government institutions. We need to anticipate how people will interact with these flows of information and how we will use them to shape new lifestyles, innovative economies, new kinds of communities, and novel forms of governance.

These ten strategies invite us to consider both the technical details and the broad policy questions that will help us build a workable future.
Combine the best of investor-owned and commons-based platform models

Over the next decade, the strategies we develop for platform ownership and governance will shape our economy and society. Today, those strategies tend to be polarized between market-driven, investor-owned platforms like Uber and platforms that champion commons-based platforms with collective ownership and decision-making. This polarization may be blinding us to the possibilities that exist between these two poles. For example, social entrepreneurs explicitly look for ways to create social value as well as market value in their enterprises. And new tech incubators are looking for ways to mix the best of venture-backed startups and cooperative ownership models—combining the incentives to innovation that market forces seem to foster while also supporting the more equitable distribution of wealth and decision-making that comes with collectivist approaches. In their position as leading edge innovators, platform designers can discover and prototype new options along this continuum, but can social inventors also create the market and policy environments where these prototypes can take root?

TECHNICAL ISSUES OF PLATFORM DESIGN TO SOLVE:
How can platforms quantify and track worker contributions and convert them to equity? How can platforms or protocols build in options for workers to participate in decision-making? How might platforms support social values such as sharing, learning, and teaching? How can commons-based platforms achieve the high-efficiency, high-design interfaces of market-driven platforms? How can platforms and protocols be designed to support collective decision-making and ownership without succumbing to a “tragedy of the commons”?

POLICY ISSUES TO SOLVE:
What policy or regulatory mechanisms could protect prototype models from extreme market or extreme regulatory forces during experimental phases? How can individual cities serve as “playtest zones” for new work models and new regulations? How can we break through the logjam of regulations to test new models of ownership and governance while still protecting workers and employers?

The risk needs to be shared, i.e. investor cooperatives

INSIST on OWNERSHIP and GOVERNANCE, not just ACCESS.
"This is a STEP, not a CURE-ALL."
WHAT can DEMOCRATIC OWNERSHIP and COOPERATIVISM do better?
WHAT CONNECTIONS do we need to FORM?
2 Solve for both transparency and privacy

Transparency in platform-based worker transactions can change our vision of the workplace and indeed the larger economy. It can show us how wealth is distributed and what levers we might use to adjust that distribution of wealth. Transparency can help workers see the marketplace value of their work as well as a larger social value. It can reveal how the decisions of platform owners and managers are driving both profits and earnings. It can combat fraudulent or criminal uses of platforms. Transparency can generally create a basis for negotiation, risk reduction, and informed choices at all levels in the economy. At the same time, transparency often seems at odds with privacy. We can aim for anonymity as a way to protect individual worker data, but anonymity has proven an elusive target. Positive platforms have the potential to inject much greater intelligence into our global economy with transparency, but how will they balance that transparency with privacy?

TECHNICAL ISSUES OF PLATFORM DESIGN TO SOLVE:
What new analytics will best help us understand the emerging labor economy and how can diverse platforms share the data to create those analytics? How can platforms use emergent data about everything from pay scales to market demand to help workers make better choices of how to work and how to charge for the work they choose?

POLICY ISSUES TO SOLVE:
What are core worker needs for privacy, and who will be the advocates for meeting those needs in the on-demand economy? How can transparency be mandated while protecting proprietary processes for organizing tasks and teams to get work done? What new guidelines will we need for the use of high-resolution worker data in collective bargaining, lawsuits, and other legal proceedings that may arise?
Integrate marginalized workers in a sustainable economy

Among low-income households worldwide, nearly half have no digital access. Even those that do have access typically have a workaround mix of devices and connectivity, often in communities without the basic infrastructure for digital trade and monetary exchange. Furthermore, platform access is not the only barrier to participation in the on-demand economy: in both low- and high-income countries, many workers lack both basic digital skills and the ability to read and write in the official language, hindering their ability to participate in the platform economy. But low-wage work is not just the domain of unskilled workers: the majority of the low-wage workers in the U.S., for example, have specialized training beyond high-school (such as home care workers, pharmacy assistants, and educational assistants). However, the tasks these workers perform are generally undervalued in the marketplace. Wage policies are often stuck in an old framework of unskilled laborers/blue-collar factory or trade workers/white-collar office workers/professionals. In today’s service economy, these classifications don’t reflect the realities of skilled workers who have been marginalized either by policy or market forces. Positive platforms can help reclassify jobs, revalue them to reflect their true social value, and make sure everyone has access to decent work. But how can labor policy and communications policy alike support this reinvention of work at the margins?

TECHNICAL ISSUES OF PLATFORM DESIGN TO SOLVE:
How can platforms be designed to function in workaround ecosystems of devices, connectivity, trade, and banking? How can Artificial Intelligence-enhanced platforms be designed to adapt to different levels of user skill and literacy? How might platforms and tasks be designed to build basic skill development into on-demand work and reflect that development in wages? How can diverse workers participate in platform development and task classification?

POLICY ISSUES TO SOLVE:
How can cities lead local policy innovations in support of low-wage citizens? Is there a realistic path to a universal basic income that at least partially decouples income from work? How can we develop a policy framework that breaks out of the historical system of unskilled/blue-collar/white-collar/professional classes to recognize the reality of today’s workforce? How might policymakers work with platforms to establish wage levels that reflect the true value of work to society?
4 Ensure opportunities for workers to advance outside of traditional organizational hierarchies

Traditional organizations provide efficiencies of scale by creating levels of management that ultimately define potential career paths for workers to advance their skills, income, and status. By contrast, platforms tend to be hierarchy-agnostic. Individual reputations, created emergently by diverse employers, count more than official pay grades. But those reputations are not necessarily linked to any clear path for individual advancement. In some ways, a widespread on-demand economy of the future will likely look more like a movement than a traditional economy of organizations, with emergent roles for leaders, catalysts, innovators, community organizers, and contributors. Positive platforms can shine a light on these large-scale movements within the workforce at any given point in time. They can reveal the emergent roles and paths within them, but how can they help workers make choices and invest in personal brand-building in a way that enhances the capacity of the human workforce?

TECHNICAL ISSUES OF PLATFORM DESIGN TO SOLVE:
How can platforms help identify paths to worker growth and make those paths visible to workers? How can platforms coach workers to improve their performance? How might platforms match workers with “stretch” opportunities? How can platforms support the process of learning to learn? How can platforms help workers craft their own distinctive brands? How can platforms encourage workers to seamlessly “level up” their skills?

POLICY ISSUES TO SOLVE:
What new roles will define distributed or decentralized communities of work, and how can we prepare people to succeed in those roles? What are new ways to reward workers in a distributed, on-demand economy and how can those rewards be turned into compelling incentives? How might we discover, define, and encourage ways for groups or networks of people to advance together?
5 Support worker-owned identities

As work shifts online, platforms will capture vast stores of worker data, turning details of work histories into value for both employers and workers. This data will lay the foundation for online reputations. It will open doors to some opportunities while closing others. The questions are: who will own this data and how will workers manage it to create the kinds of identities that help them achieve not just income goals but life goals? Already we see battles taking shape on social networks and search platforms as users try to lay claim to their online identities. These claims—and the management responsibilities that go with them—will become even more contested as bits of data are spread across multiple platforms and aggregators emerge as gatekeepers who may not represent the worker at all. And if blockchain technologies gain a foothold in this world of on-demand work, they may take decentralization of worker identities a step further, encrypting all data. Positive platforms can support workers in managing their distributed identities to their own advantage, but how do we assure that workers know how to make the most of their data to build and share prosperous identities?

TECHNICAL ISSUES OF PLATFORM DESIGN TO SOLVE:
How can we design on-demand ecosystems of platforms and protocols in which individual workers own all of their work-related identity information? How can platforms or protocols give workers control over which part of their identities they share in which situations? How can platforms help workers build the skills they need to manage such distributed identities, especially in an ecosystem of open systems?

POLICY ISSUES TO SOLVE:
What new kinds of worker protections will be required to assure that worker data isn’t misused or abused? What new rules might govern representations of worker identities and how might they be enforced? What liabilities will platforms or protocols face for processing worker data? What forms of redress will both workers and employers have for misrepresentations of reputations?
Create ways for workers to bring their voices together

The on-demand economy is moving people out of factories, shops, offices, and corporate campuses—physical gathering places where workers traditionally meet as teams, as communities, as groups with a shared voice. They are moving onto virtual platforms where they often perform tasks alone, out of context, and without any way to see the larger value of their work, communicate with their peers, or collectively address platform issues. As people lose their traditional meeting places, they also are losing their ability to develop shared values and to negotiate for those values. Furthermore, as this digital work becomes increasingly global, the legal contexts for negotiating compensation, rights, benefits, and claims are often uncertain and complex beyond the easy grasp of even sophisticated platform users. At the same time, new kinds of jurisdictions are emerging, including the platforms themselves. Positive platforms can intentionally create ways for workers to bring their voices together, but can such platforms help workers gain the power to “get employers and power brokers to say YES when they want to say NO”?

**TECHNICAL ISSUES OF PLATFORM DESIGN TO SOLVE:**
How can positive platforms help workers in both physical and digital workplaces discover their common interests, in real time and over time, to scale up their voices? How might worker-centric algorithms be designed to negotiate with employer-centric algorithms to represent the interests of thousands or millions of workers?

**POLICY ISSUES TO SOLVE:**
How can worker protections be negotiated across highly diverse ecosystems of workers? How can new kinds of protections appropriate to new worker risks be identified (for example, protecting workers against capricious claims of IP violations)? What roles can cities, in particular, play in creating new places and policies in support of both physical and digital workers?
Worker benefits are more than perks and incentives for employees. They’re a safety net for both individuals and the economy as a whole. They smooth out interruptions in employment, provide for the long-term security of large swaths of the population, and assure the necessary downtime for health and well-being. All of these benefits contribute to the overall health of the economy. Yet individual benefits and protections are often limited to particular jurisdictions, such as individual countries or corporate or government institutions. As workers shift to on-demand employment, sometimes working across multiple platforms around the world, how will they secure everything from health insurance, disability insurance, and retirement savings to paid family leave and even paid vacation? Portable benefits have been suggested as a flexible solution to flexible work, and positive platforms can create the economies of scale and cross-boundary reach that such benefits require. But how will these benefits be designed and accessed in a mobile global workforce—and what role can positive platforms play in their successful deployment?

**TECHNICAL ISSUES OF PLATFORM DESIGN TO SOLVE:**
How are benefits—and rights to benefits—tracked across diverse workplaces and platforms? How can platforms create economies of scale in the provision of portable benefits? How can platforms help individuals make better work choices for their long-term well-being? How can platforms help workers manage risk as they manage their benefits?

**POLICY ISSUES TO SOLVE:**
Should portable benefits solutions be market-based (like private pension plans) or commons-based (as in social security systems)? How will costs be shared? How do the benefits transfer across jurisdictions with different approaches to this basic market-commons dichotomy? Who creates the standards for benefits that work across hybrid ecosystems of institutions, markets, platforms, and protocols?
Integrate learning and work

Even as workers are turning to platforms to organize their work lives, learners are seeking out learning opportunities on diverse platforms outside traditional educational models. From online courses to learning games to mentoring networks, learners are finding new kinds of resources that don’t demand long periods of sequestered learning before advancing to new levels of competency in the workforce. In fact, working and learning are increasingly integrated into mutually reinforcing experiences. At the cutting edge of these innovations are platforms that allow learners to reap the benefits of their labors. For example, language learners might learn by translating text for a fee. Positive platforms could adopt this model more broadly and pay learners to do real-world tasks as they learn, effectively turning learning into earning. But how will we rethink work tasks as learning tasks and vice versa to create these virtuous cycles of learning and earning?

TECHNICAL ISSUES OF PLATFORM DESIGN TO SOLVE:

How might platforms invert the traditional pattern of learning to increase one’s earning potential and give workers opportunities to earn from learning that accomplishes real tasks? How can new measures of learning be incorporated into platforms and used to build reputations, resumes, and income?

POLICY ISSUES TO SOLVE:

How can we assure a robust education for everyone in a distributed ecosystem of learning and work? How can we set up digital certification schemes that are accessible to working learners with a wide range of resources, including financial, talent, skills, and time? How can we create a healthy culture of working learners, where learning isn’t an added financial and time burden on workers who want to advance?
Prepare youth for “the hustle”

In the past, it made sense to prepare students for the workforce by teaching them through repetition to follow orderly procedures, to adopt standardized ways of learning, and to measure their learning against those standards. This was what the industrial and post-industrial workforce demanded, and our educational system—from kindergarten through the early college years—was organized to deliver. But in the high-demand world of entrepreneurial innovation, the best way for workers to enter the interwoven flows of money, people, and opportunity is to spot the novel, to break the mold, and to create something unique. In addition, they need to learn concrete skills for the platform economy—skills like personal financial and time management, self-branding, and self-promotion. And this way of learning needs to start from an early age. Positive platforms can help children safely prepare for this rough and tumble world, but how will we shift the measures of academic success to gauge the readiness of students to participate in an emergent, on-demand labor economy?

TECHNICAL ISSUES OF PLATFORM DESIGN TO SOLVE:
How can learning platforms leverage the game metaphor of leveling up to inspire kids to learn for fun and to satisfy their curiosity? How can learning platforms help kids identify opportunities for innovative solutions to problems and provide rewards for original thinking? How can platforms help kids learn to make connections that improve their learning outcomes? What kinds of non-monetary rewards can platforms provide to catalyze entrepreneurial behavior? How can platforms help kids learn entrepreneurial behavior from one another?

POLICY ISSUES TO SOLVE:
What are the skills that students will need to succeed in the new ways of working? How can we build appropriate entrepreneurial skills into every level of K-12 education without overemphasizing competitive values? How can we start to engage learners in the traditional K-12 age range in learn-to-earn opportunities while protecting their needs for free and unstructured play?
Champion a Good Work Code

In emergent, rapidly evolving systems, principles and codes of conduct can often provide more flexibility—and more desirable outcomes—than a proliferation of rules and regulations. Toward this end, the National Domestic Workers Alliance has already laid the foundation for a set of principles for the on-demand economy: its Good Work Code (goodworkcode.org) sets out eight basic principles for everything from safety and security to a livable wage to support for growth and development. We find ourselves at a moment in time when we can actually integrate these kinds of principles into the emerging on-demand economy—to make a choice to create a world where workers thrive. Positive platforms and protocols can set the trajectory for worker well-being by designing software and processes to meet a code of good work, but how will we champion these basic principles across a diverse worker ecosystem and operationalize them in the next all-important decade?

**TECHNICAL ISSUES OF PLATFORM DESIGN TO SOLVE:**
How can virtual platforms embed principles like worker safety and inclusivity into the day-to-day transactions they facilitate, especially when those transactions cross physical-digital boundaries? How might platforms help workers and employers negotiate when conflicts around a Good Work Code arise? How might platforms reward workers and employers who live the code on a daily basis?

**POLICY ISSUES TO SOLVE:**
How can we engage broad-based support for a Good Work Code across organizations, platforms, protocols, and geographies? How do we build a community (or communities) of advocates for a Good Work Code who can translate the code into specific agreements, guidelines, and sanctions in real-world situations? How can we make sure the ways we implement the Good Work Code are effective across diverse ecosystems of work—for example, across different platforms or cultures?
The ten strategies outlined in this report form an agenda for digital and social innovators alike. Of course, each of the problem statements embedded in these ten strategies deserves more development. Existing intellectual work needs to be integrated with the cutting edge thinking happening in the platform design community to spell out both the technical and policy issues in more detail. In fact, this effort could be organized as a platform-coordinated task-routed project to bring the best minds and most diverse points of view to each project definition.

Once defined more fully, this set of ten strategies for a workable future could also be the foundation for an engaged global conversation, using an online ideation platform like IFTF’s Foresight Engine as well as coordinated workshops among stakeholders in communities across the country.

Ultimately, these strategies form a set of open talking points for educators, activists, journalists, and government policy makers who want to move the conversation about platform-based work beyond the W-2 vs. 1099 debate to help shape a truly workable future. Beyond these debates—indeed even beyond these ten strategies—we as a society are already creating a de facto massive-scale operating system for managing not just organizations but civilizations. As humans, we are no longer at the center of these operating systems, bringing human awareness and values to the minute-by-minute decisions that might impact billions of people. So these systems need to be designed from the beginning to contribute more to the world than they extract. In economic terms, the positive externalities need to outweigh the negative externalities. If we get this single engineering problem right, we create a sustainable, equitable world. If we get it wrong, these systems will tear a hole in whatever stands in their way to get what they are meta-programmed to achieve.
We are grateful to our participants, whose vision and insight contributed to this report. While inspired by the workshop, the views expressed in this report do not necessarily represent those of the individual participants, nor do the participants necessarily endorse the conclusions.
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1 See the Appendix for a list of participants.

2 In a survey by Peers, more than half of on-demand workers surveyed (n=255) responded that there needs to be a new classification of worker types. https://medium.com/the-wtf-economy/flexibility-security-on-demand-workers-seek-benefits-but-not-employee-status-d78d2d3fcc72#.3kupcekgc

3 Tess Posner, Samaschool, workshop presentation.


5 For example, the city of Seoul, Korea, has created its own platform-based taxi service with the explicit goal of assuring workable wages.