# re aligning human organization

A TOOLKIT FOR MAKING THE FUTURE

Where new connective technologies intersect with today's institutional arrangements, a set of powerful mechanisms for amplifying and realigning human organization is emerging. The next decade of organizational challenges—whether they be around work and productivity, learning and knowledge creation, citizenship and community engagement, creativity and innovation, communication and collaboration, or logistics and manufacturing—will be met by thinking through new possibilities for coordination and novel ways of getting things done.
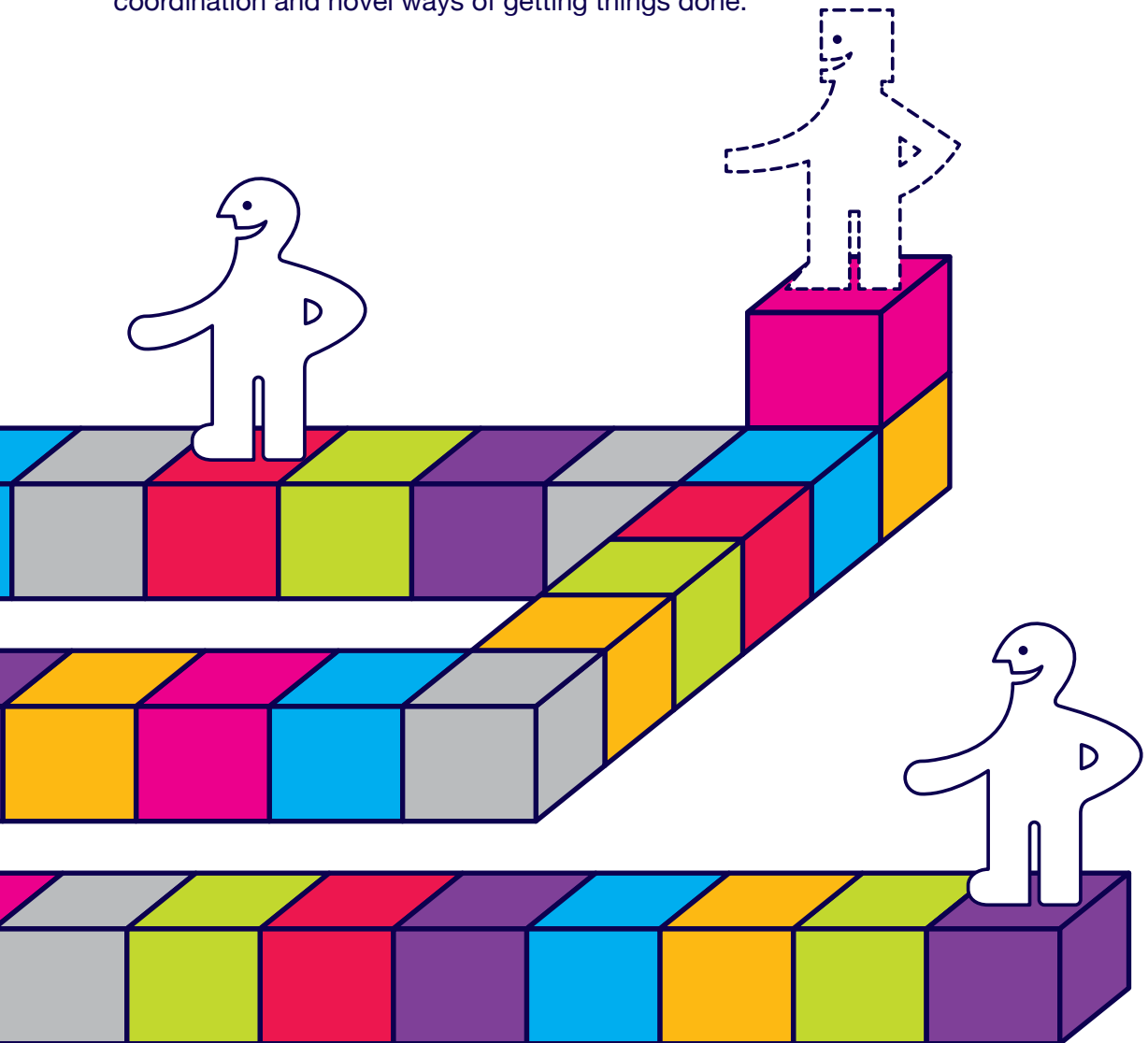
REALIGNMENT
from communication to coordination

The ever-deeper infiltration of networks into everyday life will dramatically change our approach to organizing our human experiences.

The Internet and the Web were initially centered around pure communication. Over time, they shifted toward an increased focus on commerce and the commercialization of online space. Now another big shift seems to be starting—toward coordination. To an astonishing degree, the physical world is being remade in the image of the Internet in the wake of this transition.

New online applications have emerged to better coordinate what would traditionally be thought of as offline activities. Today it is possible for organizations to hire temporary employees, and for individuals to rent out a personal vehicle, arrange an ad hoc grocery delivery, organize a local political meetup, or report a pothole in need of repair, all with the touch of a screen.

Digital approaches to coordinating human activities are only going to expand over the next decade. We will be challenged not only to apply network technologies to better coordinate daily life, but also to use social technologies to refine and improve our collective thinking. These emerging technologies will allow us to build machines to coordinate ideas in ways that can produce new wisdom and new value.

More broadly, we are moving from a world of hierarchical social structures toward one in which resources, including human resources, can be digitally activated, deactivated, and reconfigured to come together when and where needed. In this environment, linear assembly lines and supply chains will gradually be replaced by more dynamic and adaptive networks. The process of activating shifting clusters of people and things within a global network is strikingly similar to our own thought processes. Already, many have speculated that we are seeing the emergence of a collective "hive mind" with its own logic.

These new tools will upset the status quo. Powerful technologies of coordination will dramatically shift the current forms of institutions. In the wake of this creative disruption, your challenge will be realignment.
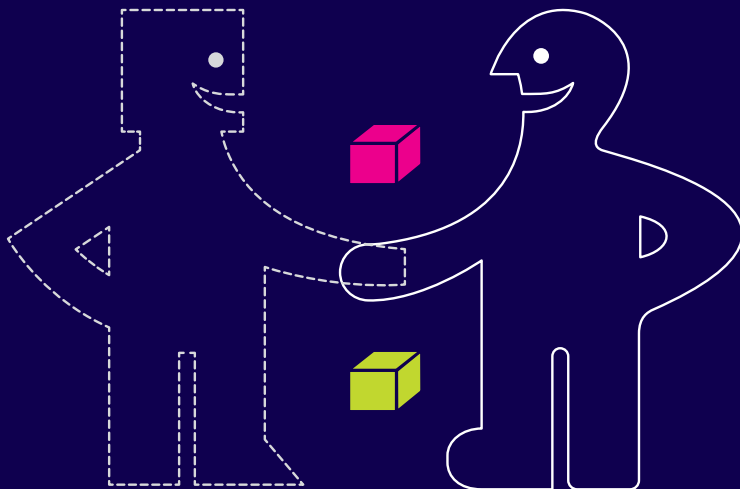
MECHANISMS
for realigning human organization

Six mechanisms are emerging for coordinating and realigning human activity. These mechanisms link people, practices, technologies, and organizations.

human task routing

Human task routing is an evolution of crowdsourcing that uses software to route or manage crowd contributions. The approach will be used to tightly coordinate a complex series of tasks so that they come together as on-demand crowd processing or "human computing."

socialbot swarms

As more of our interactions take place online, persuasive socialbot swarms will emerge to influence opinions and shape behaviors. These software programs operate on social networking platforms, quickly work to gain friends and followers, and take active roles as shapers of a social group.

here-sourcing

Hyperlocal situation-awareness nets will intensify our ability to rapidly scan and source human resources from our surroundings—social search engines for the 21st century. These capabilities will create new ad hoc working groups like flash mobs to get a job done on the spot.

do-ocracies

As communities of discussion grow into platforms for action, the do-ocracy will emerge as a potent force for massive co-creation, directed mischief, and rapid awareness of social and political issues. Do-ocracies bring together people who share similar passions or values and who create temporary action subgroups that often persist only until a goal is accomplished.

matter routing

The emergence of free-range automation technologies will increasingly allow the logic of Internet routing to be applied to the physical world. Already, a new industry is emerging around business models that promise to help coordinate physical objects so that they are available where they are most needed.

autonomous algorithms
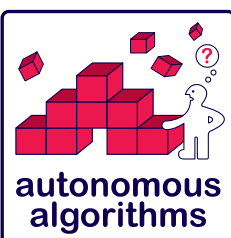
Background computing processes known as daemons control more and more of the stuff around us—physical infrastructure, buildings, and even motor vehicles such as Google's self-driving car. Increasingly, they will be programmed to manage humans in organizations as well as physical systems.

A toolkit for making the future

Whether you are facing the imperative to innovate or to do more with less, this toolkit lets you imagine how new connective technologies can help you realign your future.

Step 1: Amplify

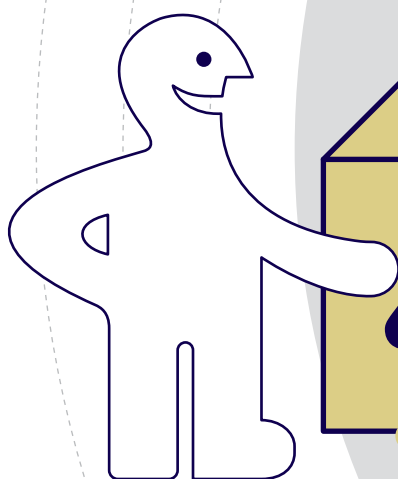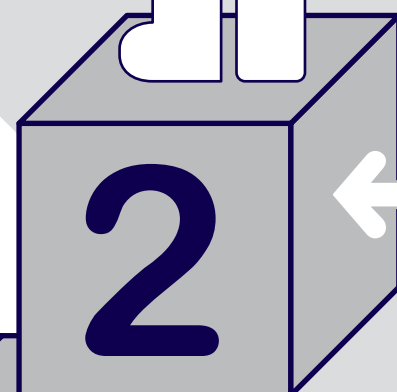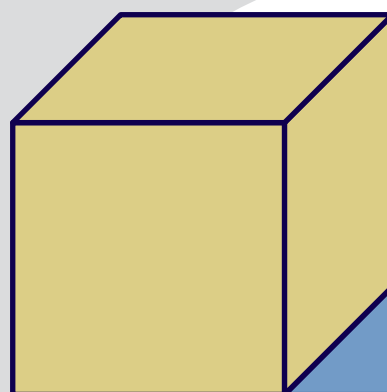Prepare to **amplify** the way you get things done—faster, smarter, better.

- **Think through the things you do** as part of an organization, a community, your household, or your daily life.

- **What opportunity do you see** for amplifying or disrupting the way you get things done?
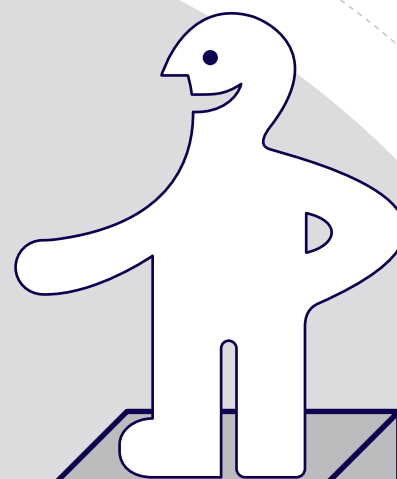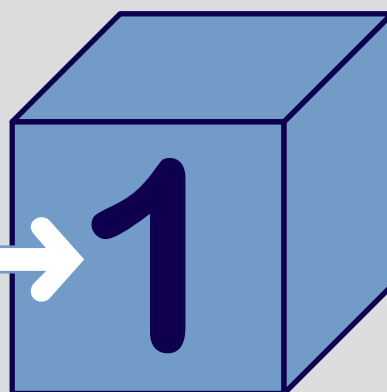
Step 2: Immerse

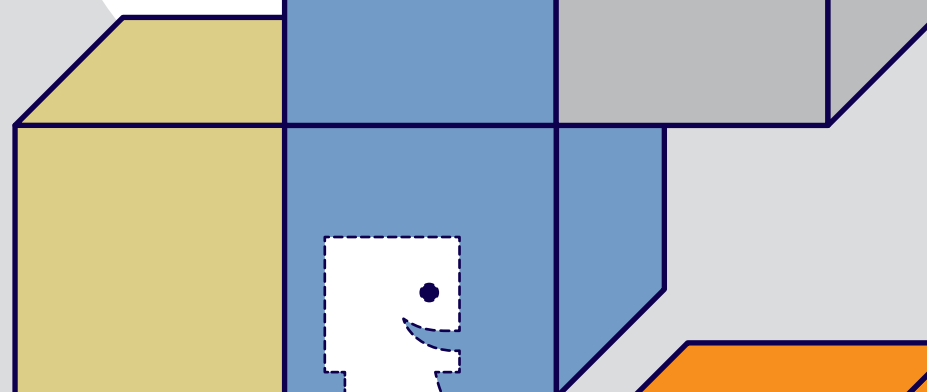**Immerse** yourself in six mechanism cards for realigning human organization.

- **Explore the signals**—illustrations of each mechanism already in play today.

- **Consider the "what if?" scenarios**—imaginative sketches of creations that might emerge.

- **Answer a set of strategic** questions to explore each mechanism's potentially amplifying or disruptive effects and implications.

Step 3: Prototype

Choose at least one mechanism and consider how it could amplify or disrupt the way you get things done. **Prototype** what's possible.

- **Design an app** that brings your insights together.

- **Post a microtask** to tap into networked resources.

- **Scope out** how your competition will leverage this new mechanism to disrupt what you currently do.

Step 4: Realign

Tell your story of future **realignment.** Imagine your new way of getting things done five years out.

- **Which mechanism(s) made this future possible?**

- **What new organizational abilities did you gain with your prototype—** efficiency, reach, agility, resilience?

- **What were the trade-offs and unexpected consequences?** What really mattered?

Amplify

The next decade presents us with new opportunities to amplify our capabilities. As individuals we can accomplish almost superheroic feats, extending our influence and engineering our time to get more done. Together in groups and organizations, we can minimize wasted resources and engage all members to the best of their abilities. But disruption is the flip side of amplification. Our existing patterns of work and coordination will be upended by fast-moving algorithmic processes and emerging lightweight competitors. Take the first step to explore future possibilities and build individual and organizational readiness.

INDIVIDUALS

citizenship

- How can we engage more people in government to create massively participatory democracies?

- How can we tap citizen resources to fill gaps in civic services?

learning

- What new services can connect students with the best instructors and most relevant peers anywhere in the world?

- How can we create personal and pervasive educational experiences to engage all types of learners?
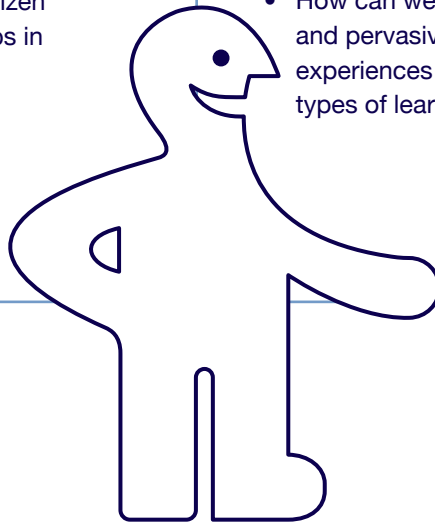
community

- How can we harness the deep diversity—from potential shared interests to latent affinities—in our connected communities?

- How can we move communities of interest into communities of action and coordinate new capacities in public safety and public health?

ORGANIZATIONS

innovation

- How can new technologies amplify current investments in research and development?

- How can we seek the best ideas from global networks of thinkers and makers?

communication and collaboration

- What are new ways to communicate authentically and personally with consumers and users at a large scale?

- What are new recipes for collaboration with the best of online tools and offline interactions?
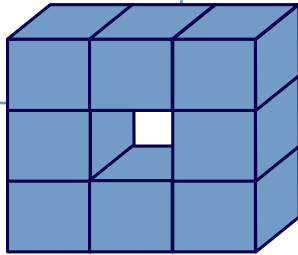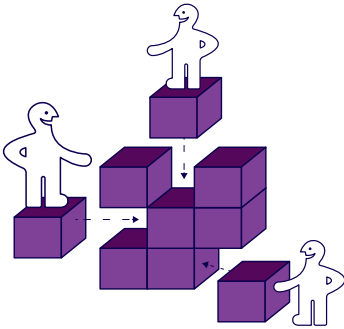

manufacturing and logistics

- How can manufacturing become more flexible and adaptive through the use of mobile, lightweight, and/or shareable equipment?

- How can manufacturers unbundle existing factories and distribution systems to improve energy efficiency, product quality, and design innovation?
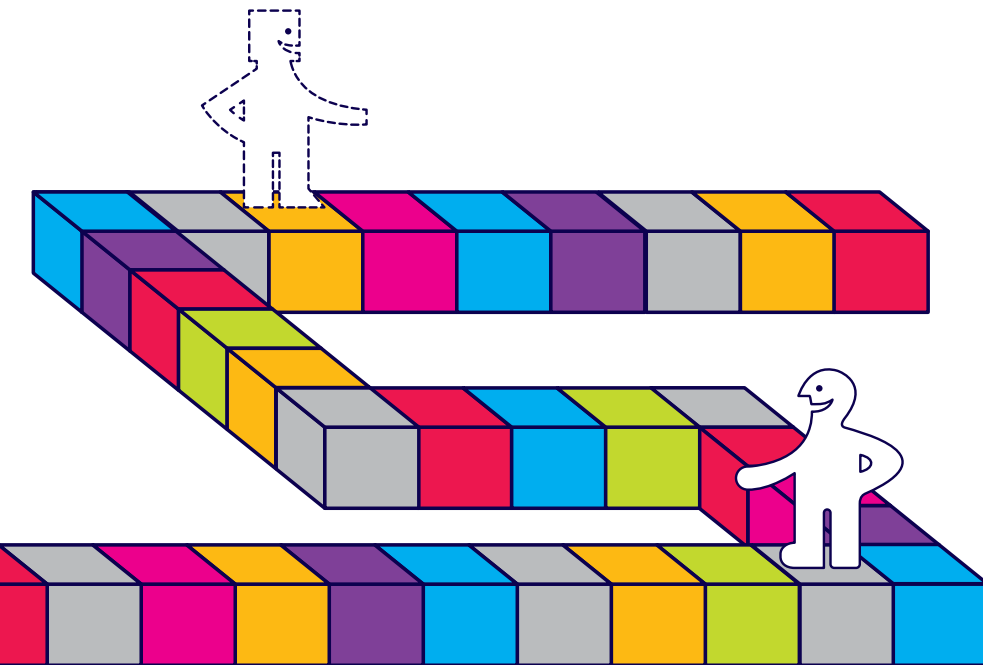
Human Task Routing
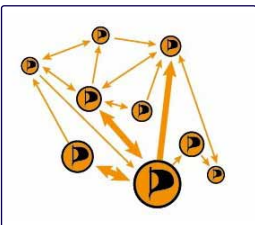## ON-DEMAND CROWD PROCESSING

Human task routing is an evolution of crowdsourcing that uses software to route or manage crowd contributions. In some cases, this is simply a matter of matching a task to the most qualified person available to address it. However, the approach can also be used to tightly coordinate a complex series of tasks so that they come together as on-demand crowd processing or "human computing." This new form of coordination can not only help solve the thorniest problems faced by businesses and researchers but can also create manageable, accessible jobs for people all around the world who need them. Already, microwork is employing the underused talents of people from urban slums and villages, from cities and farms, and from a variety of educational and professional backgrounds. This mechanism will be a foundation for coordinating any activity in the coming years, and a potent force for amplifying and disrupting existing institutions.

Signals

Soylent

As "a word processor with a crowd inside," Soylent routes writing microtasks to anonymous contributors on Mechanical Turk using algorithms that allow crowds to edit documents in real time.

LiquidFeedback

LiquidFeedback, an online system for discussing and voting on proposals in an intraparty or intraorganizational context, blurs the boundaries between representative and direct democracy by allowing users to directly delegate their votes to those they believe are most qualified to represent their interests.
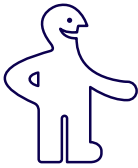
cdn4.spiegel.de

MobileWorks

MobileWorks "puts the underemployed talent of the world to work" using algorithms not only to route tasks to those who seem to be the best match but also to allow crowds to propose and vote on potential approaches to completing tasks.

crunchbase.com

What if …

INDIVIDUALS

citizenship: Cincinnatus

This online system coordinates public service efforts and helps provide on-demand direction to citizen volunteers in cases of emergency, disaster relief, and even everyday civic contributions.

learning: Hivemind Academy

While traditional education has relied on individual instruction, Hivemind Academy seeks to integrate learners into a collective that can more quickly process information and make informed decisions.

**community:
Home Traffic Control**

Household management is more efficient with this application designed to assign household tasks and chores to anyone—whether family members or domestic microworkers—in the best position to complete them.
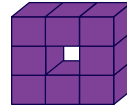
ORGANIZATIONS

innovation: Flash Brainstorms

Organizations use task routing to cycle a new idea through several phases of brainstorming and development across many people.

communication and collaboration: InboxFinder

When unsure who to approach about an issue, you simply send an email to InboxFinder, which uses text analytics to identify the people in your organization most likely to be able to help and routes the message to them for real-time answers.

**manufacturing and logistics:
Virtual Foreman**

The Virtual Foreman software manages production crews, and coordinating worker contributions based on real-time feedback.

human task routing

Start prototyping

1 Crowds can tackle large data sets quickly. What simple analytical tasks need to be done rapidly in your organization?

2 Human task routing can undermine learning and knowledge accumulation. How does knowledge management work in a crowdsourced workforce?
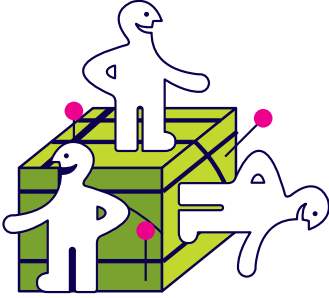
3 Human task routing requires a new set of management skills. How can you start to train someone to manage crowdsourced work?

Here-sourcing
FLASH MOBS THAT WORK

For more than eight millennia, towns and cities have served as social search engines, allowing people with shared interests, goods to trade, and complementary skills to find and interact with each other. Traditionally, buildings and districts provided structure to these searches. You went to a bookstore to discuss ideas about literature, a stock exchange to buy and sell shares, or a guild house to learn and apply a trade. But social graphs, location awareness, and predictive data-mining technologies are now converging into hyperlocal situation-awareness nets that intensify our ability to rapidly scan and source human resources from our surroundings. These capabilities will create new ad hoc working groups to get a job done on the spot. They will also create throwbacks to old forms of on-the-fly organizational design. Here-sourcing a temporary workforce from the surrounding crowd may feel as routine as hiring day laborers from informal street-corner labor markets.

Signals

pulsepoint.org

PulsePoint

The PulsePoint mobile app allows citizens trained to perform CPR to receive alerts of nearby cardiac emergencies. The alerts include the location of the nearest public-access defibrillator.

s3.amazonaws.com

Coffee & Power

A location-aware social platform for professionals, Coffee & Power helps organize collaborative work sessions at public and private worksites.

projects.csail.mit.edu

Twist

The Twist mobile app allows people to share current location and ETA, including traffic delays, with ad hoc or predefined individuals or groups.

What if …

## INDIVIDUALS

citizenship: Crowdville

The Crowdville mobile app lets cash-strapped cities replace local government functions with distributed, engaged citizen groups. Find out where efforts are needed to monitor surveillance cameras, write regulations through a wiki platform, or fill potholes during lunch.

learning: Excursion Meetup

Ad hoc groups organize field trips on the Excursion Meetup site for immersion-style learning. Spend your Monday afternoon with others studying wetland biology or local architecture.

community: CrowdDates

Log in to the CrowdDates mobile app to take part in on-demand speed dating in a local nightlife district, powered by social ratings and deep analytics.
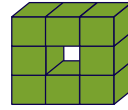
ORGANIZATIONS

innovation: Instant Hackathons

Instant hackathons gather nearby makers to address InnoCentive-like challenges in open day-long or week-long prototyping sprints.

communication and collaboration: Breakout— Escape from the Office

Break creativity blocks, expose workers to new ideas, and attract fresh talent! Breakout teams use connected parks for massively collaborative coworking sessions.

manufacturing and logistics: TruckShop

TruckShop is a high-quality, high-volume mobile machine shop and rapid 3D printing facility that can quickly be repositioned for short production runs.

here-sourcing

Start prototyping

1 Here-sourcing allows new ideas to be developed and tested rapidly without investing lots of capital in workplaces, recruiting, and training. What kinds of projects have you considered but not pursued because of these obstacles?

2 Here-sourcing is a great way to find and build relationships with new talent you may not have known about. What parts of your organization could use a dose of fresh blood?

3 Rapidly assembling a pool of talent from a nearby area may be easy in San Francisco or Manhattan, but how could it work in other places that aren't dominated by a freelance culture?

Do-ocracies
TASK TRIBES
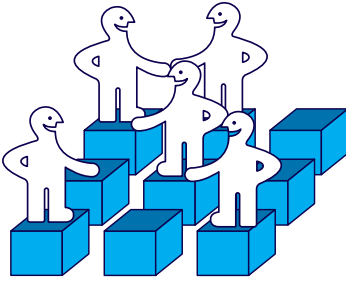
As communities of discussion grow into platforms for action, the do-ocracy will emerge as a potent force for massive co-creation, directed disobedience, and rapid awareness of social and political issues. A do-ocracy typically begins as a loosely connected network of people who share similar passions or values. As discussion turns to potential actions, members of a do-ocracy break off into smaller groups organized around shared goals and coordinated sets of tasks. These subgroups often persist only until a goal is accomplished, dispersing as quickly as they formed. Do-ocracies in the future will be characterized by evolving arrangements of leadership and identity. Leaders will be whoever is the most persuasive at attracting energy to a cause. As the most anarchic new mechanism of coordination, do-ocracies will be difficult for traditional organizations to harness. A just-build-it attitude is fundamental to developing many new types of networks.

Signals

allthingsd.com

Anonymous

The Anonymous global collective has dubbed itself the hive mind, though some of its most prominent hacking and protest actions come from ad hoc smaller groups of members convincing others to join.

github.com

Fork a Repository
Copy a repo to create a new, unique project from its contents.

GitHub

Part software code repository, part social network, GitHub lets users create their own version—or "fork"—of a project. But only through conversation and consensus can a new fork be accepted as a core feature of the original code.

reddit.com

Reddit

Reddit is a social news site focused on technology and Internet culture where users vote stories and causes to front-page prominence. In recent years, the Reddit community has become the first catalyst for action on issues from thwarting legislation that would regulate the Internet to raising $1 million for a bullied school monitor.

What if …

INDIVIDUALS

citizenship: Anon-Checker

Anon-Checker reveals if your applicants or employees are working for Anonymous. This proprietary software is guaranteed to alert you to individuals who may be secret "hacktivists" or have "leaker" sympathies in your organization.

learning: Readdit

The Readdit platform lets groups of rogue educators and passionate experts come together online in 72-hour flash sessions to create open-source textbook alternatives.

community: DogmaHub

Contributing to the move toward open-source religions, this software lets anyone in the congregation "fork" a core belief, tinker with it, and nominate it to be part of the canon.
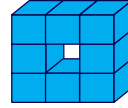
ORGANIZATIONS

innovation: Intrupt

Intrupt is an anonymous intranet where members of an organization plot to disrupt their business model and brand before others do it for them.

communication and collaboration: Caballer

Building on the success of start-ups with flat hierarchies, the Caballer recommendation engine analyzes a group of employees who want to work together and suggests a project based on shared skills and market opportunity.

manufacturing and logistics: JustDoIt

The 24-hour JustDoIt hackathon pairs ideas with engineers and makers to prototype new products using existing supply chain materials in creative new ways.

do-ocracies

Start prototyping

**1** Do-ocracies work well in hostile operating environments. What problems might yield to this approach?

2 What incentives can you offer to engineer the formation of do-ocracies in your organization?

3 Another kind of leaderless group that companies engage all the time is consumers. How can consumer marketing inform engagement strategies for do-ocracies?

Autonomous Algorithms
DAEMONS IN THE INFRASTRUCTURE
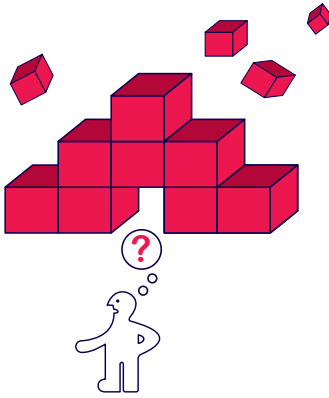
Background computing processes will control more and more tasks of human and organizational activity, for good reason. Algorithms can process new information and react faster than any person. Financial markets, physical infrastructure, even motor vehicles such as Google's self-driving car will soon be dominated by these autonomous daemons. Within the tasks they perform, these programs are capable of learning. Increasingly, they will be programmed to manage humans in organizations as well as physical systems. "Corp bots" that manage electronic businesses will be able to decide when and where to initiate electronic transactions, and even to form new business entities themselves. At some point we will be able to design entire organizations around algorithms with just a handful of humans in charge. But as the master passwords that can be used to control them are lost or forgotten, they will become largely autonomous. Free of human safeguards, they may react to unexpected events, and each other, in highly volatile ways.
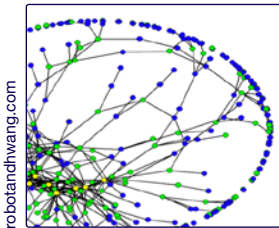
Signals

Knight Capital

A trading malfunction stemming from software errors in August 2012 at major brokerage Knight Capital Group resulted in $440 million in losses for Knight, rattled the stock market, and renewed concerns over computerized trading on Wall Street.

conspiracyplanet.com

Robot Robot & Hwang

Tim Hwang, whose Robot Robot & Hwang LLP site promotes disruptive technology for the law, is working on a toolkit that allows people to use computer code to program the behavior of corporations in the same way that people can program robots.
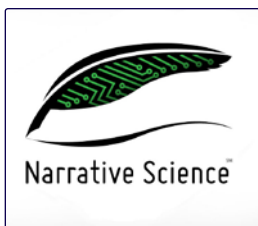
robotandhwang.com

Narrative Science

The algorithms behind this startup translate raw data into plain English stories, from sports scores published as news articles to market data instantly blogged as financial reporting.

narrativescience.com

What if …

INDIVIDUALS

citizenship: Code for America Brigade—Bot Assassins

Local volunteers hunt down and infiltrate physical and cyber defense rings, and shut down rogue autonomous bots in municipal infrastructure.

learning: Archimedes

Learning math is easier with the Archimedes bot pitching problems of increasing difficulty that are adjusted based on the user's learning style.

community: Slow Algo Cities

Neighborhoods, districts, and towns that declare themselves "automation—and algorithm—free" return to manual, human-coordinated networks for distributing resources and services.
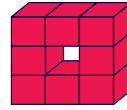
ORGANIZATIONS

innovation: EvolutionWorks

Genetic algorithms design simple objects through the mechanisms of natural selection, such as an airfoil. Massive communities of autonomous algorithms could develop evolutionary designs of much greater complexity such as, an entire aircraft.

**communication and collaboration:
The Internet of People**

The Internet of People is a sandbox Internet for humans only, with new Turing tests designed to distinguish humans from bots.

**manufacturing and logistics:
Indian Corp Bot Crash of 2017**

An army of corporations created by autonomous agents revolutionizes the efficiency of Indian manufacturing, but a lithium shortage triggers fight-to-the-death bidding war and wave of bankruptcies.
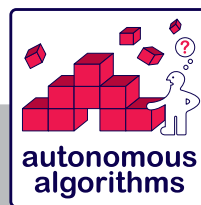
autonomous algorithms

Start prototyping

1 Autonomous algorithms bring speed to decision making and execution. What transactions do you participate in that would benefit from this kind of automation?

2 A major downside of autonomous algorithms is the potentially unpredictable dynamics that can occur as they interact with humans, markets, and competing algorithms. How can you manage the risk of runaway programs?

3 When fully autonomous online organizations can do it all, what is left for humans to do? How can you maintain the big picture?

Socialbot Swarms
PERSUASIVE CONNECTORS

As more of our interactions take place online, persuasive socialbot swarms will emerge to influence opinions and shape behaviors. These autonomous software programs will operate on social networking platforms and quickly work to gain friends and followers by finding common interests and imitating casual conversations. Socialbots will first be deployed to disseminate marketing and political messages to target audiences, or automate natural-seeming interactions between brands and their customers. More advanced socialbots will take active roles as shapers of a social group. These programs might be designed to automatically inject happy people into depressed groups, link habitual exercisers to the sedentary, and introduce citizens with high levels of local engagement to neighbors who are more disengaged. The growth of socialbots may be curbed in the next decade by a growing backlash and new defenses against nonhuman programs—but they are just as likely to be adopted as a beneficial influence.
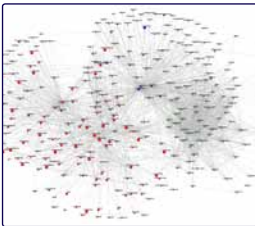
Signals

unofficialprogrammer.files.wordpress.com
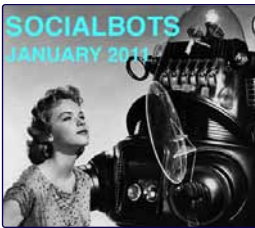
Socialbot Competition

The first competition to find the most influential socialbots on Twitter—run by the research collective Web Ecology Project—gave socialbots points for attracting new followers and for the number of interactions with real humans.

ca.olin.edu

Project Realboy

Project Realboy was an early Twitter bot experiment with three goals: clone tweets from real people to seem human, start following people in an existing social group, and aim for a 25% follow-back rate.
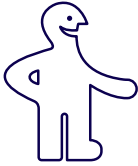

Bot or Not

The Bot or Not project will scan a social network profile on request and report back signs of automated or repetitive activity to alert users to how the "botfestation of the Web" might be affecting them.

What if …

INDIVIDUALS

citizenship: Pre-acekeepr

Building on predictive models of early indicators of violence, peacekeeping bots watch for elevated signs of preconflict and create links between opposing groups.

learning: BotSensei

Bot-based tutoring algorithms watch what you're trying to learn or accomplish and connect you to experts a level ahead to keep you challenged and motivated.

community: YinYang

Striving to create a balanced society, YinYang socialbots connect long-term thinkers with nowists, optimists with pessimists, and liberals with conservatives.
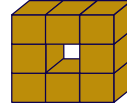
## ORGANIZATIONS

innovation: CasualCollisions

Get your teams out of their silos! These socialbots forge new connections between disconnected parts of your organization to engineer serendipitous collaborations.

communication and collaboration: InfluenceShield

Wonder if you're the target of an online influence campaign? Use this software to scan your friends and followers for unusual activity and connections.

manufacturing and logistics: SupplyWebbot

Facilitated connections between regional manufacturing and supply operations begin to create combinatorial industries.

Step 2: Immerse
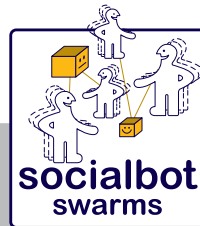
socialbot swarms

Start prototyping

1 Socialbots are particularly effective at creating new connections in social media. What groups do you work with that you'd want a socialbot to connect?

2 Socialbots work by analyzing the content of conversations in social networks. What other ways could you use this data?
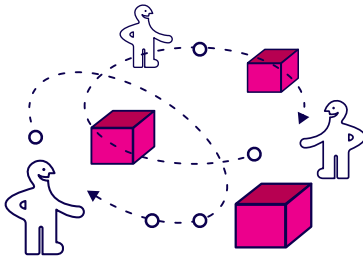
3 How might you mitigate any reputational risks of being discovered using socialbots?

Matter Routing
PHYSICAL PACKET SWITCHING

The emergence of free-range automation technologies will increasingly allow the logic of Internet routing to be applied to the physical world. Already, a suite of services is emerging around business models that promise to help coordinate physical objects so that they are available where they are most needed. While the model is most pronounced in applications like Getaround, a service that allows users to rent out their personal vehicles, its origins can also be seen in more established Internet business models like Netflix. Moving forward, matter routing will become far more dynamic, as experiments with technologies like self-driving vehicles and drone-based delivery networks reach the commercialization stage. Ultimately, matter routing is likely to converge on something that looks very much like packet switching for physical packages.

Signals
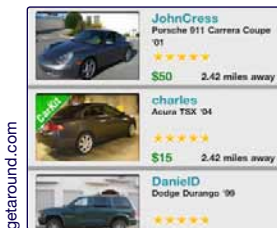
getaround.com

Getaround

Getaround is an online car sharing or peer-to-peer car rental service that allows drivers to rent cars from private car owners, and owners to rent out their cars for payment.

edmunds.com

Google's Driverless Car Project

An effort to refine technologies developed for DARPA's Grand Challenge competitions for self-driving vehicles, Google's driverless car project has proved the concept of robotic cars, with thousands of miles already logged in traffic.

blogs.discovery.com

Matternet

This start-up seeks to use quadracopter drones to deliver goods and medicine to hard-to-reach regions, beginning with deployment in Haiti.

What if …

INDIVIDUALS

citizenship: RoadDrone

A swarm of network drones delivers a kit of materials directly to damaged roads and bridges just in time for local civic heroes to arrive and complete the repairs.

learning: School Supply Grid

Schools facing budgetary constraints can log in to a school supply grid site to pool resources with other schools and share a smaller stock of supplies across many classrooms on an as-needed basis.

community: Aging-in-place Networks

The decline in the driving abilities of older adults has led to isolation. Matter routing technologies accessed through aging-in-place networks give seniors control over grocery delivery and transportation to activities.
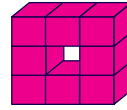
ORGANIZATIONS

innovation: Pop-up Experimentation Platforms

Matter routing allows rapid mobilization to experiment in promising new areas of exploration—from one-day shopping centers to focused flash R&D labs.

communication and collaboration: Orchestrated Office

Precise routing of matter in workplaces allows knowledge work to be more efficient and resemble assembly lines of the past.

manufacturing and logistics: Autonomous Vehicle Fleets

Autonomous vehicles allow businesses to route their products to where they are needed, when they are needed, without reliance on their own trucking fleet or expensive delivery services.

matter routing

Start prototyping

1 Packet-switched networks are highly resilient even when many links are destroyed. What kinds of high-risk environments do you operate in that might benefit from matter routing schemes?

2 Matter routing is a great way to swarm resources to a single location, but severe congestion could result. What kinds of safeguards might be put in place to prevent this?

3 Matter routing could pose a major environmental challenge by greatly increasing the energy intensity of logistics and distribution systems. How could you offset or mitigate this effect?

Design an App

A mobile app can connect people to your opportunities wherever they go.
Through smart phones, tablets, and other always-connected and location-aware devices, you can engage people in previously untapped niches of time and place. On-the-ground resources can become actionable at a moment's notice.

What does someone use your app to do? What are the two most important features?

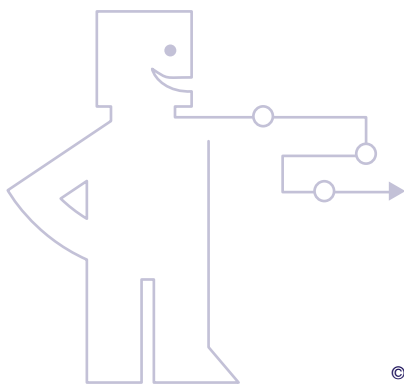**What type of person** uses this app? How did he or she first learn about it?

Tell a story about how someone will engage with this app:

What are they doing?

Do they get a message to participate?

What do they request, or what are they asked to help with?

How is location important to the story?

Step 3: Prototype

Microtask:
Socialbot Pre-acekeeping

The UN Pre-acekeeping (Pre-Violence Peacekeeping) Group is seeking to establish new connections between social networks in potential conflict zones. You should have experience designing influential socialbots that can persuade disconnected groups to friend or follow each other and maintain these connections long enough to increase empathy ratings. Bring your own predictive conflict models or use ours.

#socialbot #peace
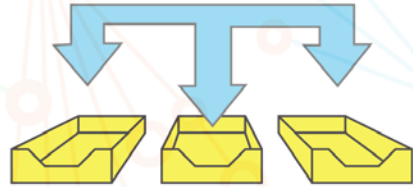#automatedempathy #preconflict

$0.02 per new connection

Task:
Monitor a surveillance cam

Task:
Visualize an urban dataset

Task:
Correct Arabic-language machine translation

This task was routed to you based on your digital trail:

Seeking someone with expertise in combinatorial innovation to expand 5 bullet points in my report. Contribute as much as you can and then route the task to next person. Accept and I'll unlock access to report.

Accept   Re-Route

Worth: 10 points per bullet

Task:
Answer: what is the future of China?

Task:
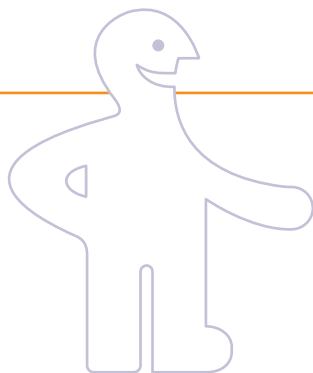Rate quality of another microtask

Post a Microtask

Microtasks invite new approaches to bringing people together to get things done. In recent years, many people have speculated about the emergence of a "Hollywood model" of work, where teams come together for a discreet project and then disband when that project has finished. However, the next decade will go far beyond this vision, to the point where it is actually possible to divide work into dozens or hundreds of microtasks and engage a distributed network of workers or volunteers to tackle them. Microtasks can be algorithmically matched to a contributor's expertise, skill, interest, or location, even in parallel coordination with other workers.

What tasks within your organization require irregular attention or could easily be divided into very simple steps?

How will you handle quality control? Will you sort through the submissions, or would you like them to be rated by another task process?

In many ways, microtasking is like a utility that can be turned on and off as needed. When would it be most beneficial to open up this additional workflow?

What barriers to using microtasking exist within your organization? What new management techniques would be required?
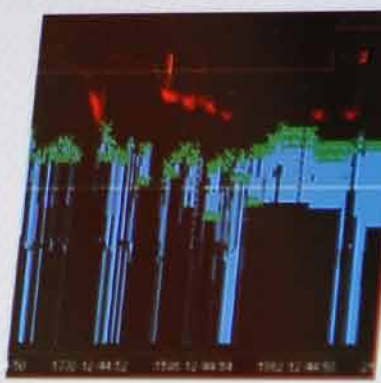
Step 3: Prototype

Launch a Start-up Competitor

How would a new start-up disrupt your industry or business model? Imagine the opportunity to start from scratch by putting the six mechanisms to work. This is a chance to rethink your organization's existing assumptions and change your current patterns of work.

How would one of the mechanisms help drive this start-up? Could you link two or more mechanisms together?

How would you structure this new start-up differently than your own organization? What functions would you keep at the core, and what tasks could be distributed to new networks?

What new skills would you look for in new hires or new members of your start-up?
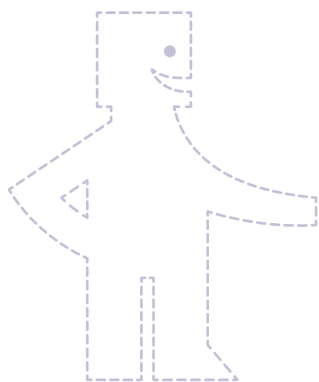
STORIES OF REALIGNMENT: The U.S. Postal Service

Re-Imagined USPS Resumes Delivery
UPS And FedEx Face A Lean New Competitor

By Susanne Turkington

Washington, D.C. Re-inventing the U.S. Postal Service began a week before the last-ever scheduled delivery reached Nome, Alaska on February 10, 2016. In the stark concrete headquarters overlooking a newly renovated L'enfant Plaza in this city's Southwest section, Sam Lee stared at a sheet of red figures. The agency was insolvent. He pulled out his ancient Rolodex, handed down by his predecessor, and began calling Senators' offices, looking for a bailout.

Things didn't go well. only a handful of legislators would take his call, and none had any interest in adding to the existing $22 trillion national debt. But after sharing his woes with a local bus[ ] who invited him [ ]er of venture [ ] roached him. [ ] posed was a [ ] approach to mail [ ] would harness new [ ]hnologies and new ideas about organizational design.

The plan hinged on three innovations. The plan hinged on three innovations. **First, get rid of delivery workers and scheduled collection.** Second, automate public relations. Third implement an ad hoc logistics system and citizen driven delivery.

In a controvertial move. USPS ended full time employment of delivery workers and scheduled collection. Since legitimate non-junk mail was highly variable, it didn't need a

In a radical bid to save the organization, the USPS harnessed latest technologies for coordination and organizational design, including ad-hoc citizen delivery of mail.

flickr/ naelyn

dedicated workforce. An ad hoc workforce of itinerant carriers, responding to variable price incentivies depending on demand, meant the new delivery service would only have to pay labor costs when there was actual mail to be delivered. Using a new technique called "here-sourcing" this approach could also address seasonal spikes in mail volume.

The second piece was large-scale logistics. Lee's staff had crunched numbers provided by the auto industry and estimated that there was enough space capacity in the trunks, pickup truck beds, and backseats of America's

Interstates to handle five times the daily inter-city distribution needs. USPS developed an autonomous vehicle app that vehicle owners could download, which would automatically insert the pickup and dropoff waypoints into the vehicle owner's route, estimate the additional travel time, and compensate them accordingly.

The third piece was to automat[ ] public relations. Not since th[ ] days of the "going post[ ] massacres of the 1980s a[ ] 1990s, when some 40 perso[ ] were killed by postal worke[ ] had the USPS's reputation b[ ] so low. But by deploying an a[ ] of learning socialbots to try t[ ]

Realignment

Realignment is the story of how you make the future in new ways. Imagine five years have passed. Every day a distributed network contributes to your work through microtasks, people use your app wherever they go, and new organizations and dynamic networks build on the six mechanisms of coordination to reboot how we get things done. The work of every organization has been disrupted, but some have been able to amplify their mission and thrive in this new landscape.

In five years …

Who are the new participants in your organization? What new kinds of networks are you engaging? How is their relationship to your work different than that of current stakeholders?

What was the tipping point for your realignment? How did you know you were successful? Where did you encounter resistance?

What do you gain in your realignment? How are you more resilient, agile, or efficient? How are you reaching more people?

What might you lose? Who in your organization holds the big picture? How do you navigate new conflicts between groups you work with?

What can you do today to start realigning your work?

Institute for the Future

The Institute for the Future is an independent, nonprofit strategic research group with more than 44 years of forecasting experience. The core of our work is identifying emerging trends and discontinuities that will transform global society and the global marketplace. We provide our members 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. The Institute for the Future is located in Palo Alto, California.

Technology Horizons

The Technology Horizons Program combines a deep understanding of technology and societal forces to identify and evaluate discontinuities and innovations in the next three to ten years. We help organizations develop insights and strategic tools to better position themselves for the future. Our approach to technology forecasting is unique—we put people at the center of our forecasts. Understanding humans as consumers, workers, householders, and community members allows IFTF to help companies look beyond technical feasibility to identify the value in new technologies, forecast adoption and diffusion patterns, and discover new market opportunities and threats.