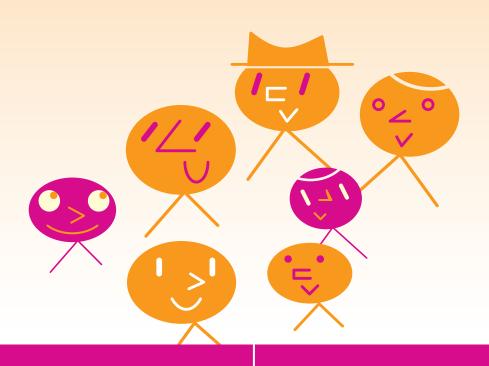


ENGAGEMENT ECONOMY

the future of massively scaled collaboration and participation





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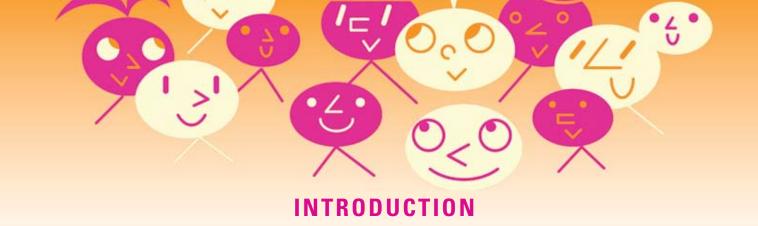
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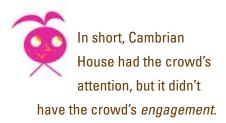
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On May 12, 2008, the Internet industry blog Tech-Crunch reported what probably came as a bit of a shock to many of its readers: Cambrian House, a popular crowdsourcing Web site, was selling off its assets and getting ready to shut down most of its operations. On the face of it, Cambrian House looked like anything but a failure. It had launched in mid-2006 with a nearly \$8 million dollar investment and a clear goal: "to harness wisdom and participation of online crowds to filter, build, and commercialize software ideas and businesses." It had received a steady stream of positive press, largely focused on its innovative economic model that allowed members to share the financial benefits of any successful projects that emerged from the community. For a while, its crowdsourcing model seemed to be working. In less than two years, the Web site had accumulated more than 50,000 members and a pool of 7,096 ideas for new software and Web applications. It was averaging 15,000 visitors per month to help refine and develop those ideas.

The site was unable to overcome one major problem, however: most members preferred to look at and perhaps occasionally rate the ideas, instead of actively participating in the process of bringing them to life. In the comments section of the May 12th TechCrunch post, Cambrian House CEO Michael Sikorsky reflected on the community's demise: "Most of the heavy lifting kept falling back on us [the site founders], or a few select community members ... The wisdom of crowds worked well in the model, but it was our participation of crowds aspect which broke down." As a result, virtually all of the 7,096 ideas languished, while the public mostly watched and evaluated.

1 Introduction



In short, Cambrian House had the crowd's attention, but it didn't have the crowd's *engagement*.

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ement.

The inability of Cambrian House to turn members into active contributors is an important signal of a new kind of challenge facing any organization that seeks to reap the benefits of crowdsourcing, collective intelligence, massively scaled collaboration, or social networking. For these groups, they must do more than merely "grab eyeballs," register members, or collect ratings. To effectively harness the wisdom of the crowds, and to successfully leverage the participation of the many, organizations will need

to become effective players in an emerging *economy of engagement*.

In the economy of engagement, it is less and less important to compete for attention, and more and more important to compete for things like brain cycles and interactive bandwidth. Crowddependent projects must capture the mental energy and the active effort it takes to make indi-

vidual contributions to a larger whole.

But how, exactly, do you turn attention into engagement? How do you convert a member of the crowd into a member of your team? To answer these questions, innovative organizations will have to grapple with the new challenge of harnessing "participation bandwidth." To do so, they may start to take their cues not from the world of business, but rather from the world of play. Game designers, virtual world builders, social media developers, and other "funware" creators have the potential to offer essential design strategies and economic theories for otherwise "serious" initiatives. Indeed, Indiana University economist and games researcher Edward Castranova believes that the real world is on the verge of a "fun revolution." Both traditional organizations and start-up communities may benefit greatly from looking to the online "fun engineers" for lessons in how to drive meaningful, passionate engagement with the increasingly crowd-dependent projects we are all creating.

In the economy of engagement, it is less and less important to compete for attention, and more and more important to compete for things like brain cycles and interactive bandwidth.



EXPERIMENTS IN MASS COLLABORATION: The Burgeoning Economy of Engagement

In their 2006 book *Wikinomics*, Don Tapscott and Anthony D. Williams famously implored business leaders: "We must 'collaborate or perish'—across borders, cultures, disciplines, and firms, and increasingly with masses of people at one time."³

Without a doubt, this call has been heeded. Companies around the globe now regularly experiment with multiple forms of mass collaboration, such as prediction markets (for example, Inkling), open innovation markets (Innocentive), and micro-task work markets (Amazon's Mechanical Turk). They're producing internal wikis, setting up social networks for their employees, and building branded public spaces in virtual worlds (Second Life and Virtual Laguna Beach), on popular social networks (Facebook and Myspace), and across other social media sites (YouTube, Flickr, and Twitter). In undertaking all of these new activities, companies hope to reap the rewards of working together at "extreme" scales and in work contexts where every group member plays to his or her strength.

There is no slow-down in sight to either the number or the scale of massively participatory communities being launched. Mass collaboration is seen as so central to future business practice that in the past year, multiple, competing communities such as CrowdSpirit, FellowForce, CrowdSpring, and Kluster have emerged to capitalize on corporations' demand for eager participants. Each of these crowdsourcing communities promises to match organizations with specialized networks of enthusiastic amateurs and freelance experts for business activities such as product research, product design, marketing, and content development.

Looking at the broader technological landscape, the next ten years are almost certain to see exponential growth in all kinds of participation networks powered (and hopefully made profitable) by crowds. Every kind of group imaginable—corporate, start-up, research, not-for-profit, grassroots, entertainment, media, and artist—is taking part in the "mass collab" (short for massively collaborative) movement. Consider for example this small sampling of the many types of increasingly common massively participatory projects:

- Peer2Peer translation networks, such as DotSub, an online platform that enables crowdsourced translation and subtitling for digital videos.
- Social news systems, such as Current TV's online "news game" that
 invites viewers 24 hours a day, 7 days a week to help create two minutes
 of each hour of on-air programming.
- Citizen science projects, such as the University of California, Berkeley's stardust@home project, which invites volunteers to search for interstellar dust through virtual microscopes and Foldit!, the University of Washington's collaborative and amateur-friendly protein-folding environment.
- Crowdsourced art, such as Post Secret, a curated collection of anonymous community-contributed postcards describing the sender's most private secrets.
- Open-source search engine development, such as Wikipedia founder Jimmy Wales's Wikia Search and Jason Calacanis's Mahalo start-ups, both of which hope to use social networks and human filtering to improve search results.
- Crowdsourced artificial intelligence training systems, such as Carnegie Mellon's GWAP ("Games With a Purpose"), a set of four online minigames designed to improve Al algorithms for things like audio music genre recognition and natural language association.
- Participatory marketing campaigns, which ask consumers to create enthusiastic videos, wikis, and other Web 2.0 content to promote a product to the rest of the world, such as the Dove/YouTube "make your own commercial" campaign and NBC's official wiki for its television series Heroes.









 Crowdsourced political engagement, such as the Center for Media and Democracy's "Congresspedia" and American Public Media's "Preserving the American Dream Idea Generator."

While their goals vary from scientific to civic, social to promotional, all of these projects share a common operating model. They are seeking to create robust, large-scale communities capable of collectively producing valuable data, ideas, or content. That output will be shared, applied, leveraged or monetized, but only if—and this is a very important if—the community becomes large and active enough to produce something new and different. The value of the project's output is entirely dependent on the quantity and quality of participation from many people. And so, as an increasing number of participatory endeavors start piling up, we might begin to wonder: Given the mass effort required to fuel these projects, is there a limit to how much value can be generated annually by online communities? Are crowdsourcing and mass collaboration sustainable trends?

As it becomes
easier to launch
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network, it will likely
become equally difficult to
sustain it.

In fact, there are clear obstacles to sustainable mass participation. Social media researcher Clay Shirky notes in *Here Comes Everybody: The Power of Organizing Without Organizations,* "With many more possible groups competing for the average individual's time, the speed with which a group can become unglued has also increased." As it becomes easier to launch a participation network, it will likely become equally difficult to sustain it.

How many communities can an individual belong to before dropping out of one or another? How many projects can an individual contribute to before neglecting some and rejecting others? How long before the average collaborator screens out the vast majority of daily requests (known as "pings") from new participatory endeavors? Although it is widely believed that passionate online participation is, in the words of Shirky, "a renewable resource," it is almost certainly not an infinite resource. There are only so many potential participants, and as long as participation is designed as an active process requiring some mental effort, there are only so many units of engagement each participant can expend in a given hour, day, week, or month.

For this reason, the overall crowdsourcing culture likely will not be immune from "the tragedy of the commons." Mass collab projects will have to compete for "crowd resources" as online communities seek to grab as many "contribution hours" as possible from their members. These gains may come at the expense of other projects still striving to secure enough participation resources to achieve project viability. While collaboration

While collaboration may be the signature modus operandi of these projects, the competition for participants will be fierce, and not all projects will thrive.





2 Experiments in Mass Collaboration

may be the signature *modus operandi* of these projects, the competition for participants will be fierce, and not all projects will thrive.

As we consider these challenges, some of the key questions for the future of the economy of engagement start to emerge: Who will do all of the participating necessary to make the seemingly endless flow of participatory projects a success? Are there enough willing quality collaborators? And what will motivate the crowds who do show up to stick with a project long enough to collectively create something of value?

To address these questions, mass collab developers will have to learn how to optimize *participation bandwidth*—our individual and collective capacity to contribute to one or more participatory networks.



PARTICIPATION BANDWIDTH:

The Commodity of Engagement Economies

For most Internet users, "pings" to engage in participatory platforms are multiplying rapidly.

There are new social networks to join, new wikis to edit, new games to play, new markets to trade in, new questions to answer, new data to analyze—at work and in our free time, we are exposed to more opportunities to contribute than we could possibly accept. They exceed our own personal participation bandwidth.

On the other side of all of those participation pings are projects trying to tap into the larger cultural bandwidth to meet specific participation requirements. For most mass collab projects, these requirements can be understood in terms of "thought hours" and "community scope." The former is a measure of the mental effort required to create something of value, while the latter is a measure of the diversity of community members the project requires.

Consider, for example, the best-known crowdsourcing project to date: Wikipedia. Earlier this year, IBM researcher Martin Watternberg joined forces with Clay Shirky to calculate the rough sum of thought hours required to get to the current state of Wikipedia—"every page, every edit, every line of code, in every language that Wikipedia exists in." Their "back of the envelope" calculation came out to 100 million thought hours.

As daunting as this number seems, participation bandwidth may in fact be increasing quickly enough to sustain many projects at this level. Shirky notes that in the United States alone, people annually spend a total of 200 billion hours watching television. If all of that were converted into mass collab engagement, the United States alone would produce the equivalent 2,000 Wikipedia-like projects a year.

3 Participation Bandwidth

Even if only 1% of that were converted—in other words, if everyone swapped two hours of television per week for online contributions—they would collectively produce 20 Wikipedia-sized projects a year. In fact, the percentage of conversion is likely to be higher than that. Numerous studies have shown that people younger than 30 are swapping the majority of their TV time for Internet time. And as a result of this cognitive migration, Shirky notes that, finally, "we're seeing things being designed to take advantage of that cognitive and social surplus, to deploy

it in ways more engaging than just having a TV in everybody's basement." Changing leisure activities combined with the rise of mass collab investment at the workplace means society's overall participation bandwidth is on the rise.

Compounding the rise in participation bandwidth is a growing sense among scientists that contributing to large-scale group projects is a fundamental part of happiness. In the relatively new field of positive psychology, or the "science of happiness," one of the most oft-repeated findings is that the desire to join communities and contribute to projects much larger than ourselves appears to be a natural human instinct. University of Pennsylvania psychologist Martin Seligman, considered the founder of positive psychology, has even argued that the evolutionary purpose of positive feelings such as

joy, optimism, and happiness, is specifically to encourage human cooperation. In the

conclusion of his seminal work Authentic Happiness, Seligman writes:

Positive emotions are part of a sensory system that alerts to us the presence of a potential win-win. They also set up an action repertoire and a mindset of collaborative activities "that broadens and builds abiding intellectual and social resources." Positive emotions, in short, build the cathedrals of our lives.⁸

He encourages readers to look for cathedrals to which they can contribute and to become of service to "something much larger than you are" as often as possible. It would seem that the scale and purpose of many crowdsourcing and mass collab communities fit this prescription for a happier everyday life, a fact that is likely to increase popular interest in massively participatory culture.

But will this rise of our culture's overall participation bandwidth be focused enough to consistently produce value? In some cases, yes. There will be anomaly superstar projects that accomplish great things. But it is more likely that, in the short term, participation will be diffused across the myriad new collaboration communities. This diffusion will almost certainly thwart most projects' efforts to achieve the minimum functioning requirements for thought hours and community scope.

Diffusion of participation bandwidth is currently the norm. "On YahooGroups," reports Shirky, "half the proposed groups fail to get enough members to be viable ... while almost three-quarters of proposed open-source projects on SourceForge have never gotten to the degree of completeness and utility necessary to garner even a single user." Meanwhile, on Wikia, the leading free wiki site, a full 43% of new articles achieve less than .5kb of data—in other words,

If everyone swapped two hours of television per week for online contributions—they would collectively produce 20
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roughly 20 words of text (or half the length of this sentence).¹⁰ These are just a few examples of a widespread phenomenon that will likely be amplified by increased competition for participation bandwidth. Paradoxically, we can expect to see even higher percentages of mass collab initiatives starving for crowd resources, even as more people free up more and more time to participate.

Is there any way to prevent a *crowdsourcing bubble*? Yes, but only if more of our participation systems are designed with the rules of the new economy of engagement in mind. To prevent the growing desire to contribute from being squandered, we must develop a set of best practices for passionately and reliably engaging crowds. Organizers of mass collab projects need to focus on maximizing participation opportunities for members with diffused participation bandwidth while minimizing crowd turnover.

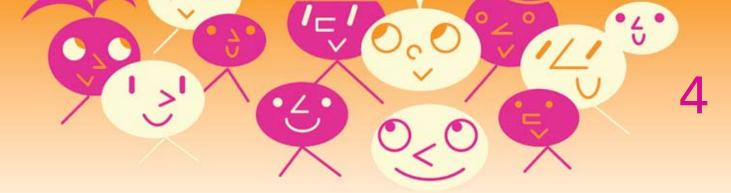
But where do we look for these best practices? A new literature of extreme-scale engagement is emerging from the fields of game design and social network research. The authors of this new literature often refer to themselves as "fun economists" and "fun engineers," and they offer unique insights into the design and development of sustainable mass collab communities.

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EXPLORING CROWD RESOUCES: Key Elements of the Engagement Economy

What makes an experience fun? What motivates someone to join a new group? What keeps an online community working together over time, instead of disbanding? What are the emotional payoffs of active participation? What currencies most effectively drive collaboration? The work most relevant to the near future of mass collaboration can be organized in four main categories: emotional incentives, the pyramid of participation, fun mechanics, and the lifecycle of crowds.

Create Emotional Incentives

Which is a more powerful incentive for collaboration—making money or feeling good?

In *Wikinomics*, Tapscott and Williams note that the first wave of online mass collaboration—from open-source software to Flickr to Wikipedia—was driven by a "culture of generosity." But as crowds create data and products of increasing financial value, will new platform incentive systems that operate using real financial currencies threaten to erode that culture? The authors of *Wikinomics* take seriously the possibility that corporate maneuvers will "trample the spirit of generosity that has sustained this run of free-spirited innovation." ¹¹

In reality, a major shift toward economic incentives seems unlikely. So far, successful crowdsourcing systems that attempt to drive participation with the promise of financial reward are few and far between. With the exception of InnoCentive, a well-known success story, most communities offering real capital in exchange for participation have produced lukewarm results at best. Consider Cambrian House, whose co-op financial model failed to motivate active engagement. Or take the example of Amazon's Mechanical Turk, which despite using micro-payments to incentivize participation, hasn't taken off as a truly active marketplace.

4 Exploring Crowd Resources

Moreover, its highest-participation projects, such as the search for Jim Grey, have been ones offering *zero* financial compensation. Passionate crowds, apparently, are quite difficult to motivate with money. Shirky sums it up by arguing that, in daily life, we've often been taught that getting paid is the only real motivation for serious work. "And now we have to unlearn that lesson because it is less true with each passing year." 12

So if not money, then what will most likely emerge as the most powerful currency in the economy of engagement? Emotion. The economy of engagement is also an economy of feelings, in which positive emotions—pride, curiosity, love, and feeling smart—are the ultimate reward for participation.

Economist Edward Castranova, who studies massively multiplayer online (MMO) games that engage their players for an average of 21 hours per week, identifies "positive emotions"—rather than escapism, competition or entertainment—as the single most important motivation for playing. He argues that most players turn to games specifically to produce the emotional high associated with accomplishing something concrete, feeling capable, and being recognized for their successes. "We can induce positive emotions by engaging in simple tasks that easily offer a sense of success ... You can beat depression by playing video games with difficulty level set to 'easy'." 13

Nicole Lazzaro, founder of the research group XEODesign, calls this valuable feeling *fiero*, an Italian word that means the rush of pleasure and thrill that comes immediately in the moment of success. It is often characterized by throwing one's hands up in the air, and no English-language equivalent of the word *fiero* exists. According to Lazzaro, *fiero* is perhaps the most important emotion to induce in players.

One clear lesson for developers of participatory systems, of course, is to design feel-good tasks that can be accomplished quickly and easily. It is less important at the onset to make something interesting or challenging than it is to make something easy. Stanford researcher BJ Fogg backs this theory up in his work on a "Behavior Change Framework," a theoretical framework that is designed to explain how to use technologies to get someone to actually do or contribute something. "You can either give people more ability by training, education, or tools—but none of these is easy. Or you can make the target behavior simpler—the right first step." 14 In the economy of engagement, the fastest way to turn attention to action may be to provide the user with a single, simple, feel-good task. Similarly, as Castranova notes, participation mechanics should be "minimally conceived and exquisitely polished." 15

Shirky, too, confirms that the pleasures of accomplishment and the feeling of competence are basic drivers of participation in online communities. He proposes three basic emotional motivations to contribute to a participatory system, the first of which is "a chance to exercise some unused mental capacities"—in other words, the emotion of feeling smart. ¹⁶ The second motivation on his list is the emotional pleasure of "vanity," which is essentially another kind of feeling capable: "The 'Kilroy was here' pleasure of changing something in the world, just to see my imprint on it. Making a mark on the world is a common human desire." And the third emotional motivation for participation, which mirrors Seligman's discussion of happiness, is simply the "desire to do a good thing. This motivation, of them all, is both the most surprising and the

The economy of engagement is also an economy of feelings, in which positive emotions—pride, curiosity, love, and feeling smart—are the ultimate reward for participation.

most obvious."

Another lesson for developers of participatory systems, then, is to trade on this desire by being clear when talking to the crowd about what good thing, exactly, will be accomplished through their participation. Shirky calls this "the promise" of a participation system, and it creates genuine love for a project: If we all work together, we can achieve this goal. But to capitalize on the positive emotions associated with "doing a good thing," a system must be as transparent as possible regarding its goals and the benefits of achieving them. To love the project, participants must be able to understand it.

Finally, a variety of emotional payoffs can also be key to engaging participants in the long term. According to Lazzaro, while certain emotions (such as fiero) are especially powerful motivators, most players are motivated at different times by different incentives. Emotions set up "a stimulus-response reward loop," pulling players through increasingly difficult tasks by consistently paying off their effort with positive feelings. Lazarro advises developers to add new incentives to the loop in order to prevent diminishing pleasure returns over time. "Emotions are the reward for a job well done," and a diversity of rewards provides for longer-term engagement.

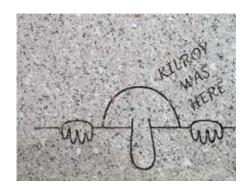
Lazzaro's chart, "Emotional Goals of Players," presents the four most effective kinds of emotional incentives, with the specific activities and design factors that are most likely to trigger those rewards. To keep participants engaged, these four core feelings range across a broad spectrum, from the pleasures of snooping (to fulfill curiosity) to the joys of spectacle and doing something silly (to amuse ourselves). A project design that features tasks specifically geared to meeting the emotional goals of the participants will likely motivate and sustain engagement far better than a design focused only on the *organization's* goals.

Understand Diverse Rewards and Design for the Pyramid of Participation

How do you engage a highly diverse community? According to game designers and social media researchers, you have to accept that there is no typical participant in any given online community. Instead, there exist multiple participant types. These types vary according to two important factors: what the participant wants, and how much the participant is willing to contribute.

The latter of these two categories poses a significant challenge to the successful design of new







4 Exploring Crowd Resources

participatory networks. Numerous social scientists, including Clay Shirky, have shown that "there is a steep decline from a few wildly active participants to a large group of barely active participants ... this is the general pattern in social media. The most active participant is generally much more active than the participant in the number two slot, and far more active than average. A common power-law distribution across all emerging participatory systems." ¹⁷

To the uninitiated, a large number of people barely doing anything could seem like a mark of failure. But systems can effectively account for, and capitalize on, this variation. Are there microtasks or one-off tasks requiring minimal effort that individuals at the bottom of the distribution curve can successfully complete? Are there large-scale, more ambitious tasks that the top users can tackle to more effectively channel their extreme enthusiasm for the project?

Crucially, all levels of participants are needed, not just the peak users. Those all-stars are performing for the barely active users, and enjoying the experience of leading the moderately active users. In this way, the community resembles a *pyramid of participation*, which is a term first coined by game company 42 Entertainment and now frequently used by many online game designers to describe their participation models. ¹⁸ Emotionally, the base of the pyramid actively supports the top, even if they are making far fewer concrete contributions. But effectively, the peak supports the entire community and the larger goals of the project, by accepting the weight of the majority of contributions.

For the broad base of the pyramid, social media research suggests that additional design strategies are necessary to motivate even the smallest level of engagement. Here, B.J. Fogg's behavior change framework is a useful tool. To the design of participatory systems, it adds the



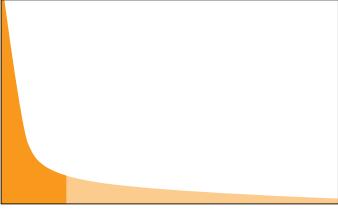
Emotional Goals of Players—

Fiero Curiosity Win Explore Goals Imagine Challenge Interpret Obstacles Investigate Strategy Creativity Figure Out Power Ups Levels **Amuse** Relax Meditate Cooperate Compete Workout Communicate Learn Perform Repetition Rhythm Spectacle Characters Completion

Collection

 $Source: Nicole\ Lazzaro,\ XEODesign,\ www.xeodesign.com$

A Typical Power-Law—From Wikipedia' Entry on Power Laws



Source: Wikipedia

Personalize

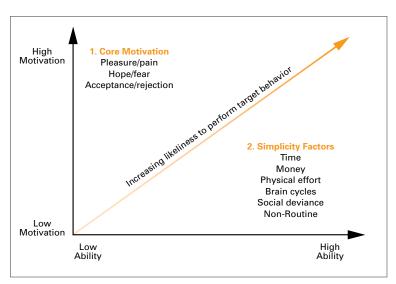
concept of a "trigger" that explicitly prompts an individual to do something. ¹⁹ This prompt may be pushed via email, SMS, instant message, RSS feed, Facebook poke, or any other kind of intimate outreach. For low-motivation community members, it is likely that only this kind of trigger will lead to active engagement.

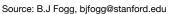
Are there commonalities among participants along the different levels of the pyramid in terms of the payoffs they seek? Studies suggest that there are. PARC researcher and MMO expert Nick Yee recently published the results of a large-scale, ethnographic study of the motivations for play in online games. His empirical research identified three types of player motivation, all of which suggest different kinds of participation styles in massively collaborative environments, with associated levels of intensity of participation.

As the chart "Motivations for Play in Online Games" shows, Yee discovered three primary motivations for MMO participation: *achievement*, the desire to advance in the game's hierarchy, master its mechanics, and compete against other participants; *social*, the desire to have positive interactions with other people and work toward a common goal together; and *immersion*, the desire to exercise imagination, consume compelling content, and think about something other than ordinary, everyday work

To understand varying levels of participation in other kinds of online communities, we can map Yee's work onto the pyramid of participation. Based on the intensity of gameplay he observed in each group, the top of the pyramid is made up primarily (but not exclusively) of achievement-oriented participants; the middle is made up of socially oriented participants; and the bottom is made up of immersion participants. Understanding this distribution may help community organizers design tasks that will fill in missing pieces of the pyramid. In a more general sense,

Behavior Change Framework







4 Exploring Crowd Resources

participatory systems that create activities in all three of these categories may find they are able to attract and sustain a more diverse community.

Crowdsourcing and massively scaled collaboration require more than raw numbers; they require aggregate diversity. Building a "pyramid of participation" that engages participants interested in achievement, social experience, and immersion in an entertaining experience can help engage the multiple types of participants required in order to achieve the range of passion, as well as the broad spectrum of perspectives, skills, talents, and resources necessary to accomplish the project's goal.

Build in Fun Mechanics and Create Meaningful Work to Extend the Lifecycle of Participation

What is fun? It sounds like an impossible riddle, but more thought hours have been spent answering this question in the game research community than virtually any other. And the answer boils down to this: Fun is typically a very specific kind of self-imposed work.

The notion may seem perverse, and indeed it strikes many game developers as counter-intuitive. In "The Labor of Fun," Nick Yee considers the question philosophically: "Ultimately, the blurring of work and play begs the question—what does fun really mean?" ²⁰ It's as if the very idea of fusing work and play were itself a great conundrum.

However, as both Yee and Castranova have argued, a simple set of design requirements for creating meaningful work are at the heart of all game design.

"Motivations for Play in Online Games."

The subcomponents revealed by the factor analysis grouped by the main component they fall under.

ACHIEVEMENT	SOCIAL	IMMERSION
AdvancementProgress, power, accumulation, status	SocializingCasual chat, helping others, making friends	DiscoveryExploration, lore, finding hidden things
MechanicsNumbers, optimization, templating, analysis	RelationshipPersonal, self-disclosure, find and give support	Role-playingStory line, character history, roles, fantasy
CompetitionChallenging others, provocation, domination	TeamworkCollaboration, groups, group achievements	CustomizationAppearences, accessories, style, color schemes
		Escapism Relax, escape from real life, avoid real life problems

Source: Nick Yee, www.nickyee.com

The first group of requirements relates to positive psychologist Mihaly Csikszentmihalyi's theory of *flow*, first introduced in 1972. Flow, also a positive emotional state, is defined as the happiness we experience when we are fully engaged in something, when we are marshalling our resources and receiving feedback that we are making progress toward a goal. It's by no means a new theory, but it recently has become so central to the game design industry that it's worth another look in the context of the design of participatory systems.

Castranova translates flow into design requirements for games: "Some of the critical elements for inducing flow are immediate feedback, a clear sense of objectives and failure states, and a challenge level that is not too easy or too hard ... This is a fairly stringent series of requirements, but also a reliable recipe. Do these things, and flow will happen. Happiness follows."²¹

If flow is the ultimate fun mechanic, then any crowdsourcing or mass collab platform that fails to provide the ingredients of flow—immediate feedback, clear objectives, visible failure states, and a staged series of challenges—will fail to achieve maximum possible engagement.

Beyond the primary design requirement for flow, MMO developers in particular have introduced a new kind of system for achieving maximum engagement: leveling. This system rewards any player with new status or powers once he or she achieves certain objectives, regardless of how long it takes the player to get to that level. Complete a particular mission, for example, and your level points increase according to how difficult or timeconsuming that mission was. Amass a certain number of points and you get a fancy new icon to display by your user name or access to more interesting parts of the community.

As Castranova argues, "The point of leveling is to mute the effects of the distribution of player skill—it enables more people to participate and contribute, without competing with more talented or skilled players. The world has both success and fairness."

With leveling in place, it is theoretically possible that, over time, the pyramid of participation will morph itself, bursting at the top with extreme-level contributors. This is because, as Castranova writes, "The top jobs—highest levels of power—are not conceived as singular positions of authority, but rather as common layers of nobility." Anyone who is motivated and engaged enough can break through the power law of distribution and become a star. The whole crowd can be stars.

Leveling is already breaking out of the game world and into every day life. +1me.com (or plusoneme.com) is a social media application that lets you level up in your real life, with the help of friends, family, and co-workers. According to the site's mission statement, "When you want to acknowledge somebody for a strength they have, you can +1 them for that attribute." The attributes currently available for leveling up include "public speaking," "backbone," "cuteness," "punctuality," and "innovation." +1me.com is a signal of the many possibilities for incorporating one of the game industry's most successful mechanics into non-game community projects.

Finally, to encourage leveling up, and to ensure that flow opportunities are always available to

Ultimately, the blurring of work and play begs the question—what does fun really mean?" It's as if the very idea of fusing work and play were itself a great conundrum.

4 Exploring Crowd Resources

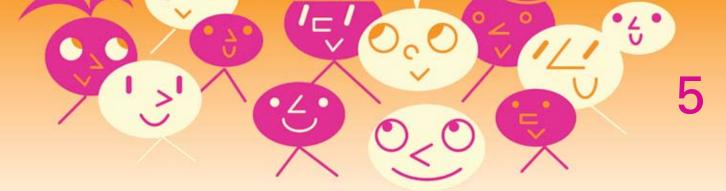
active participants, there must always be work available. Castranova argues that game designers are "responsible for ensuring zero unemployment. It is considered absolutely intolerable that a player have nothing to do." To extend the lifecycle of the crowd, you must guard carefully against "nothing-to-do syndrome." The minute a project becomes boring, a community member may redirect their participation bandwidth to something more engaging and they might never return. Of course, it is awfully time-consuming to constantly create new tasks or

missions. Empowering the community to invent their own tasks or missions is a common design technique for large MMOs and virtual worlds, allowing the community to create a workload that far exceeds what the developers could create on their own, thus growing to be self-sustaining. Indeed, crowdsourcing the design of the crowdsourcing mission may eventually become a core strategy of any truly large-scale mass collab project.

If games are fun because they allow players to collaborate to do good work, then there is every reason to believe that collaborative work can be improved by becoming more like a game. As Yee concludes, "This in fact is the purpose of all video games—to train a player to work harder while still enjoying it ... and the success of MMORPGs and video games in general demonstrates how seductive and concealed the work treadmill can be." ²⁴

Anyone who is motivated and engaged enough can break through the power law of distribution and become a star.

The whole crowd can be stars.



CAPTURING ENGAGEMENT:

How to Succeed in the Competitive Participation Marketplace

The participation of crowds has become a vital commodity that many organizations have not yet

figured out how to capture. Many crowdsourcing and mass collab projects fail to achieve viability, often because they are designed to capture attention rather than create engagement. Meanwhile, crowd resources are becoming more often contested, and potentially scarce, as many new collaboration networks are launched. In this new competitive landscape, forward-looking organizations can seek out advantages by taking several key steps toward capturing engagement.

From a human resources perspective, organizations should look to hire researchers and interactive designers with backgrounds in online gaming and playful social network design. Any mass collab project, whether internal or public-facing, will require the strategic input of experienced "fun engineers" and "fun economists." Whether as permanent IT staff or in key consulting positions, these individuals can help ensure that resources are being invested in projects that have a high likelihood of engaging crowds.

Meanwhile, beta-testers for new mass collaboration environments and crowdsourcing projects can be culled from the existing community of gamers within the company. As more and more gamers enter the workforce, most organizations already have large numbers of participation-savvy members. These are important resources for assessing the design of new projects. No mass participation system should launch without the strategic input of experienced game designers and gamers within the organization.

5 Capturing Engagement

Any mass collab project,

whether internal or

public-facing, will

require the strategic input

of experienced

"fun engineers" and

"fun economists."

Executives in charge of experimenting with mass collaboration must set reasonable internal expectations for participation levels in new initiatives, and allocate budgets and resources accordingly. Since most projects in this space fail to attract a viable community, it doesn't make sense to design projects that can only work with massive numbers of participants, or to invest large sums in single projects. A culture of small-scale experimentation in crowdsourcing and

mass collab, where the cost of failure is low, is more likely to yield success. When one of the small-scale projects has achieved viability, more resources can be invested, and therefore more fun mechanics, emotional incentives, and work flows can be introduced to grow the community and amplify the ambitions of the project.

At the same time, organizations should be aware that their members are increasingly likely to be participating in external collaboration communities as a way of augmenting their sense of engagement in everyday life. These external communities may be doing a better job of providing emotional payoffs and creating meaningful work than employees' "real jobs." Organizational leaders should find out what kinds of communities are drawing the participation bandwidth of members, and create conversations

about what employees get from their "fun work" that they may not get at their "real work." This dialogue can provide valuable lessons about introducing fun flows into the organization's primary business practices.

In this challenging new economy of engagement, organizations must be ambitious about capturing participation bandwidth while also setting reasonable expectations about the viability of crowdsourcing and mass collaboration projects. They must commit key resources to mastering the emerging art of making mass participation fun and sustainable, while bringing on staff and consultants who have already spent years working in "fun economy" industries. In the new economy of engagement, whoever captures the most passionate players and participants will have an unquestionable edge on innovation.

Organizational leaders should find out what kinds of communities are drawing the participation bandwidth of members, and create conversations about what employees get from their "fun work."

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