For years we have been writing about economics and markets, sometimes explicitly and sometimes implicitly. In the last couple of years, following the tumble of some much-touted online marketplaces, the concept has fallen out of favor. But in fact, our marketplace is abound- ing with examples of markets within markets – and of markets chang- ing as the balance of power shifts from institutions to individuals.

When society began, most production happened outside of markets, as families and communities fed, clothed and housed themselves or served a nearby landlord who (more or less) took care of them. Eventually, some communities produced surpluses, and trading began. But for centuries, markets were sluggish things. In a world of scarcity, any good produced could eventually find some use (other than things that spoiled or died). Producers created value by producing things, while others transported them to users and collected some money for those services along the way. There were feedback loops, to be sure, but they operated slowly. Prices were mostly tied to crop cycles and seasons.

Fast-forward many centuries. When computers came onto the scene, some markets were already moving quickly, served by telephone and other electronic communications. Wall Street trades settled in a week, but markets could move in minutes when something happened in stocks or commodities.

This is now changing. In a world of surplus (yes, that’s not the whole world, but it’s the world the Net mostly operates in), markets are everywhere. They help to get the right goods to the people who most want them (or are willing to pay/trade the most for them), and they send signals back to producers and investors, driving the creation of greater value – and shifting resources away from things
and activities that have lost their value. Transportation costs matter and markets are distance-sensitive, but many things languish in the wrong place only because no one is aware that they exist. Although, for example, eBay serves in general to lower prices (see RELEASE 1.0, APRIL 2004, ON SMALL BUSINESSES AND EBAY) by creating more efficient markets, it also creates value as things abandoned in attics and storerooms and warehouses find eager buyers.

Yet those markets are dealing simply with the distribution of existing products. In capital markets, for example, stock prices send signals about what opportunities are attractive, even though new money gets invested only when a company actually sells stock, takes on debt or allocates resources from one project to another, in response to such signals as well as to customer buying behavior and competitive moves. (We won’t argue here about the accuracy of such signals.)

Most traditional, mass markets that consumers deal with are slow and one-sided. The producers’ offerings don’t change that much nor are they customized, and consumers get to pick from what’s offered rather than set the terms.

Now that is changing. eBay has moved from an intermediary for distribution to a market that signals back to production; many small businesses now produce products specifically for sale on eBay. Increasingly, there are ways for consumers to exert real-time influence on what gets created. Also, they can negotiate on the timing of access to resources: Who gets the jet first? Whose package goes priority? The one who pays. That is, we see the rise of on-demand, real-time markets where consumers become active participants in designs and specs, rather than passive recipients of what the market offers. We’re talking about build-to-order, and on a far broader scale than “have it your way” at the corner burger shop. Moreover, as value shifts from goods to services, value packages can more easily be created and parameterized in real time.

In addition, marketers who used to have the upper hand in communication are now sharing the stage with users who are creating and sharing their own content. They are competing with traditional, institutional content-providers for consumers’ attention, and they
are competing with marketers to deliver messages the marketers might not want consumers to hear. Even positive consumer-generated messages pose a challenge for the marketers, whose paid messages may be less necessary to producers of goods that find favor with consumers without the need for paid intermediaries.

**New! Improved! Now with Markets Inside!**

One significant implication of the proliferation of market-based approaches is the creation of markets of markets. At one level, various suppliers compete with one another in the traditional way. At another level, a clever supplier can create a market wherein consumers interact with one another, negotiating and creating complexity, optimizing use of resources and designing solutions that a vendor could not come up with on its own. The vendor doesn’t know how Juan values time as opposed to how Alice does. Instead of aggregating demand as numbers, the customers define the products/services and interact with one another: for example (as we’ll see below), determining delivery or travel routes, scheduling themselves, cooperating in the management of electricity supply and demand, and otherwise taking part in production or design as well as consumption.

It’s not that consumer-as-producer markets themselves are new. In the old days, in the Soviet Union, almost every citizen with a car who was not driving his boss around was his own boss as a potential taxi driver, charging a fee for picking up what in other countries would be called hitchhikers. But that market was fragmented and completely obscure; you couldn’t tell who was around the corner, nor where either party was traveling until a driver stopped. Now, couriers and taxi drivers and electricity consumers can join smaller but more active markets where demand and supply are visible and can be optimized in real time across a network of interacting suppliers and customers. Of course, this benefits consumers, but it also benefits the suppliers, who see a better allocation of their resources by the markets they support in a way that more closely matches consumers’ preferences. That enables them to compete more effectively against competitors offering more traditional services that are designed top-down rather than consumer-defined.

But markets are just grease that makes the operations of these companies more fluid and responsive. Instead of negotiating with each customer, a market-based company can let its customers negotiate among themselves to resolve tough allocation and constraint problems, often behaving more flexibly and in closer to real
time than it could otherwise. Within each business, many other programming approaches and customer service considerations are also key to success; markets are just one piece of value-added.

Here are three current – or rather, one plus two soon-to-exist – examples as cases in point. ECourier is already in operation and appears be gaining traction in London’s highly competitive local-courier market. GridPoint is shipping its home market-player-in-a-box electricity backup units this summer. And DayJet hopes to start its on-demand, per-seat air taxi operations by mid-2006.

**How to make things simple – lesson 1**

Back in 1973, Federal Express made its first deliveries. In this almost pre-computer era, with its IT operations led by former IBM salesman (and future Netscape CEO) Jim Barksdale, the company’s goal was to reduce the complexity of package delivery (with error reduction as the most visible consequence) by routing all its packages overnight through a single hub in Memphis, TN. Routine operating costs were not an issue; the cost of handling exceptions was. With its simple architecture, the FedEx model reduced errors to well below 5 percent and created an industry where none had existed before. (Yes, there were adjacent markets such as courier services and multiple-day package delivery, but nothing where overnight deliveries were routine.)

The new model we discuss here is different. Rather than simplify operations to make exceptions rare, the new, P2P models de facto make every transaction an exception. Each seat on a flight is a unique, negotiated event. Each courier pickup is a dynamic, real-time, semi-optimized event.

Of course, this isn’t magic. The underlying structure needs to be foolproof; schedules and resources need to be allocated by software that simulates the customers’ requirements, locations and deadlines and the system’s resources (couriers) and constraints (routes and traffic patterns). But in essence companies such as GridPoint, DayJet and eCourier are operating markets and then providing the resources for those markets to optimize.

**GridPoint: Enabling the stupid grid**

*(apologies to David Isenberg)*

GridPoint is the creation of Bill Nitze, former assistant administrator for international affairs at the US Environmental Protection Agency (1994 to 2001) and president of the Alliance to Save Energy (1990 to 1994), and current president of the
Gemstar Group, a nonprofit focused on market-based approaches to environmental problems. Along with Peter Corsell, former director for energy markets at Gemstar, he got excited about the potential of photovoltaic (solar) panels, and they decided to follow Gemstar’s mission and create a company around the idea in late 2003. Their plan was to turn solar power from something usable only with great difficulty by homeowners and do-it-yourselfers willing to learn a new craft, into an energy appliance any homeowner could have installed by a contractor. Solar systems comprise two primary parts: the solar panels on your roof, and all the necessary equipment required to connect those panels to your electrical system – known in the industry as the “balance of system.” The residential solar systems now in the market are difficult to connect with a homeowner’s electrical system and generally lack storage batteries and cannot function during a power outage.

In the process of designing the appliance, Nitze and Corsell realized that the appliance also could intelligently manage and store energy within its batteries, enabling customers to participate in the electricity market by selling surplus energy back the electrical grid. Individual consumers simply don’t have much standing vis a vis the utilities, who see them as passive consumers. GridPoint aimed to change that by making it easy for individuals to manage, generate, store and potentially sell power. Nitze is chairman; Corsell is president and CEO.

To build the system they hired CTO Craig Miller, who brings an impressive and relevant resume to the job. As former chief scientist at SAIC, he established SAIC’s Electronic Commerce Rapid Application Development Laboratory (EC RADLab) and helped build GreenOnline, a market for environmental products and services. At SAIC, he also built major components for the $30-billion air pollution emissions online marketplace which connects more than 2000 power plants. In 1987, he designed PEDRO, the Department of Energy’s first and still premier electronic data collection tool.

Miller explains the context: The US sharply reduced its spending on its electrical energy infrastructure in the early 1980s, when deregulation began and utilities started paying more attention to short-term returns than to the cost-plus, low-risk investments they had previously made under regulation (to simplify a little!). To extend that infrastructure today would be almost impossible, but we can use the resources better, in the US and elsewhere.

Electrical power is unique because the grid has no latency; it can’t store power in meaningful amounts, though it’s fairly easy to transport it a long distance across the
grid. And in general, the market operates only one-way: Producers sell power at variable costs to utilities, who sell it at regulated prices to consumers, who typically account for 80 percent of consumption.

The prices paid by utilities to producers vary dramatically over time (across days and within each day). Utilities buy some power under fixed-rate contracts, but they can’t buy enough to cover peak demand. Thus energy prices can vary by a factor of 2 to 3 during a typical day (from night-time lows to evening peaks on a hot day), while soaring to 20 times the base on a super-hot or otherwise extraordinary day. So one key to cost savings is to smooth out the (high-cost) demand peaks, as opposed to overall production cost reductions.

The heaviest industrial customers generate much of their own power, but are grid-connected and in some cases produce enough surplus to act as power producers. Many of them participate in utility “demand-response” programs, reducing their share of the overall demand or even supplying power at the request of the utilities in exchange for payment. Miller cites a case in 2001 where the New York State Intersystem Operator (including Con Edison), paid industrial customers $4.2 million to shut down their operations and reduce their demand for electricity...because that enabled the ISO to save $16 million. Both sides were better off.

But residential and small commercial customers are too small and unsophisticated to participate in these programs. That’s partly an artifact of regulation: Utilities charge regulated, fixed prices to consumers, although recently they have – with regulatory approval – experimented with some time-of-day pricing. It’s also due to the fact that a utility simply has no easy way of communicating with its customers on the necessary scale. Thus, for most of the grid there’s no way to control demand, nor to send pricing signals to users to control their consumption.

*Consumer Edison*

Until now. Or until soon, anyway... GridPoint, based in Washington, DC, wants to give consumers the power to control their own usage – and to reap rewards for their contributions of power. From a regulatory point of view, this requires a sort of side letter from the utility: “Sure, we’ll price your power at the price we promised the regulators. But if you care to reduce your consumption at the times we suggest, and especially if you’d like to sell us some extra power from any solar panels you may have, we’ll share the cost reductions with you and pay you for the extra power you sell us.” Not even a regulator could object to that.
In some ways, it’s just like the PC/Internet markets. The early adopters – many of them pre-dating GridPoint – built their own energy-management systems as hobbyists and do-it-yourselfers. GridPoint’s first products, coming out this fall, will offer lightweight energy-consumption-management along with battery-based power backup or backup-cum-solar controls in a box, both at price points around $12,000. These systems will be easy-to-use but relatively opaque to the user. Later generations will offer more complexity and granular controls to users who want them, but will still provide default energy management for those who don’t.

Each GridPoint system is installed by a contractor who knows how to do so (shades of the old high-support PC market), and who hooks it up to the various devices in the home. At last, you’ll be able to get a utility bill that shows “refrigerator,” “air conditioning,” “stove,” “boiler” and the like rather than just “electricity – 127 KWh.”

United we produce
The idea is simple: to move beyond time-of-day utility pricing/consumption to something much more granular, and to give users automated tools to control their usage in reaction to their own needs and to price/demand fluctuations of power suppliers and – more novel – demands of other users. The GridPoint products are designed to offer value for individual customers, but the real magic will come with network effects. While one GridPoint appliance can deliver only a modest reduction in demand or sell back only a small amount of power at a time, a group of 5000 users, reducing their reserves by 50 percent each (a safe amount), could deliver 36 megawatts of power for three hours – the equivalent of a modest power plant at peak.

Over time, the installations should become easier as standards for household equipment emerge. Right now, most electrical devices don’t know what they are, says Miller, and they can’t easily communicate with GridPoint’s control software. They need to be retrofitted with GridPoint “sockets” (basically, the equivalent of APIs) that can identify them to the GridPoint local control system and receive instructions such as “turn off the heat but keep the [clothes drier’s] tumbler rolling.” (But, Miller notes, Whirlpool is working with the DOE’s Pacific Northwest National Laboratories on a line of smart appliances with API’s, and that’s just the start.)

Moreover, because all GridPoint products use the same technology and are remotely controllable through the GridPoint Operations Center, they can be dispatched (i.e. deployed in response to market conditions) as a whole, offering real value to the grid
and to specific utilities, and allowing individual unit owners to share in the benefits. The GridPoint Operations Center is both the market platform for all the GridPoint users, as well as the focal point through which they can communicate in aggregate with utilities and other parties. GridPoint’s task will be to make friends with a number of utilities on its customers’ behalf – using the promise of reducing peak demand as the lure.

Thus, the GridPoint system ends up creating a marketplace. The consumers and other users negotiate amongst themselves as consumers set their own preferences: how much heat, how cost-sensitive they are, trade-offs between heat and light, and so on. To be sure, they’re using GridPoint’s software, and they don’t necessarily understand exactly what they are doing...at least at first.

GridPoint will start selling to the public this fall. Its first unit, called GridPoint Protect, will comprise backup generators along with demand-management software to control a home’s or small business’s electricity usage. It will sell into the existing market for residential or small commercial power backup systems (most of which are generators rather than batteries). That system will sell for from $5,000 to $15,000 depending on size, competitive with (says the company) a typically vastly inferior diesel generator. Initial sales will go through consumer/builder outlets such as Home Depot, and will promise users reductions on their fuel bills of $20 to $30 per month along with the backup. The company is also working with a number of utilities to resell the product to their customers; they who are likely to offer a discount on bills to consumers who install the system and who presumably will be less costly to serve on peak power days.

Around the same time, the company will offer GridPoint Connect, which can manage the generation of power (typically from a solar system) and sell it back into the market. Corsell expects that the GridPoint black-box approach will help to expand the market rapidly.

From consumer to producer

The two products are quite similar except for a little extra hardware for GridPoint Connect (for managing a third-party solar unit), but they will be marketed and used quite differently. “GridPoint Protect is a security sale,” says Corsell, “and if we get even close to 1 percent of the $1.4-billion [annual] market, we’ll be happy.” GridPoint Connect, by contrast, sells into the smaller (20,000 systems installed) but faster-growing market for home solar power, which is subsidized in 46 states. “We’re shooting for 2 percent of the new solar market, initially,” says Corsell. “With
GridPoint Connect, you signal to the utility [through GridPoint Operations] that you can add power, whereas with GridPoint Protect you simply offer to reduce demand on request. We can aggregate the demand and supply and become a contributing factor in the power grid.

Overall, in response to pricing signals, consumers can extract a better deal from the utility than any single consumer could on his own...and the utility is happy too, because it doesn’t need to deal with a bunch of individuals and can instead reach them as a group and negotiate win-win reductions in consumption during high-demand periods. No problem running the washing machine mid-day, and letting the living room heat up during the evening, but the den needs to be nice and cool on those summer nights. Better yet, the system knows exactly how to cycle power to the freezer to keep things frozen, but to minimize peak demand, in a cycle that coordinates market-style in real time with the freezers and other appliances of other consumers. Eventually, as there are more smart appliances out there to talk with and a readier market for them, the company may sell the control software standalone for about $500.

In short, GridPoint does for the utility grid what the Internet did for the telephone infrastructure: It allows it to grow smarter and to scale easily by putting the intelligence at the edges, instead of attempting to impose centralized control. What makes this different from the phone/Internet experience, says Corsell, is that intelligence at the edges has direct economic benefits for the utilities, whereas Internet users (initially) were simply threats to the existing infrastructure. That may be true, but we’re not sure all the utilities will understand it immediately.

**Logistics Meets Markets**

The challenge for any entity that wants to run a market is relinquishing control. It’s too easy to confuse oneself with an activist god. One leading example is the US air traffic control system. It’s too large and complicated for a single control system (even one comprising about 15,000 controllers). The US government is figuring out how it can make the move to one where airplanes negotiate everything except finances with one another in the sky. Of course, there are rules of the sky and defaults (who goes up or down, to the right or the left), but the system will become decentralized and locally controlled. The central system – including people! – will probably continue to issue advisories and even make decisions about such things as what to do in par-
ticular weather conditions, but it will provide rules of engagement rather than cen-
tral control to the airspace.

Likewise, some new logistics companies are experimenting with dispatching systems
that approach P2P rather than use central control. One such company is fast-grow-
ing eCourier (PAGE 10), based in London. Its couriers carry GPS devices and its cus-
tomers book pickups and deliveries directly through the Internet; eCourier simply
sets the rules, collects the payments and maintains order. (Well, not quite, but that’s
the idea.) The efficiencies that result have given the company a good name among
would-be couriers, because they can earn more in a better managed, optimized sys-
tem that tracks their performance and rewards merit. Those same happy couriers,
individuals who physically pick up and deliver the packages, are the primary “inter-
face” the company has with its customers aside from the website, and are thus a posi-
tive differentiator for it. DayJet (PAGE 14) will be taking an even more P2P approach
when it starts operations next year.

**eCourier: C2C**

Founded in 2003 by a couple of graduate students who had been having their own
problems with inscrutable, unreliable courier services, eCourier went to the experts –
not programmers but logistics experts at universities in the US and Italy – and asked
them to design a logistics allocation system. Then the two founders, Jay Bregman and
Tom Allason, hired some programmers to build it and add a user-friendly, transpar-
ent front-end that allows customers to track their packages visually on a map of
London in real time.

ECourier delivered its first package in September 2004. It is now handling about 600
package deliveries a day, of which more than 60 percent are ordered by customers
online. Once a booking is made online, the system figures out the most appropriate
courier available and notifies him directly. All the couriers carry GPS devices that
transmit their location every 10 seconds, and they are graded on their response time
to pickup requests. (There’s no issue about being tracked; the couriers are pretty
much independent agents and they like the GPS because they can see for themselves
the improved routing and performance it fosters. They understand the value of the
system overall.)

ECourier’s so-called Advanced Information-Based Allocation system (AIBA) and its
other operations employ a variety of techniques, some market-based and some more
traditional resource-allocation and prediction algorithms. One notable challenge is
London itself, with its winding streets and variable traffic flows. Quite a few of eCourier’s couriers are taxi drivers in waiting, using their experience as couriers to learn “the Knowledge,” the detailed knowledge of London on which would-be taxi drivers are tested before they get their licenses. (Once you have such a license, you’re not likely to go back to being a courier, which is less lucrative precisely because it requires less preparation.) The system uses a detailed geographical model of its London operations, including predicted and actual traffic patterns, weather, package demand, real-time courier availability and other data. (See also Release 1.0, January 2004, on the Semantic Earth.)

So, what does AIBA do? First, using its own historical data (which of course is increasing over time) it predicts demand and schedules couriers and appropriate vehicles week by week. Currently, it pays couriers different rates according to their performance (on-time deliveries, willingness to accept assignments and so forth) and also according to predicted supply; that is, half time extra after working hours, double time on holidays (low supply) or busy times (high demand) and so forth. Couriers bid on the work slots they want, with priority going to those who have been with the company the longest. Over time, eCourier wants to automate this assignment system; currently, it’s a crude sign-up system that operates mostly first-come, first-served. As a market, it allocates more by priority than by negotiation, but as the operation becomes larger that may change. Says CTO Jay Bregman, “Our vision is to create a market amongst our self-employed couriers, having them compete for timeslots with incentives determined by our auto-allocation product and based on predicted demand patterns.”

How to make things simple – lesson 2
The system does not compute best routes, which it leaves to the couriers to figure out according to actual traffic conditions they encounter and their knowledge of the city. Rather, it simply matches jobs and couriers in real time, using its knowledge of where they are. At this point, volume is low enough that the system simply assigns the job to the nearest courier (in time, not distance) unless certain conditions apply – such as where that courier is headed, the imminence of a shift change, whether the assignment would move the courier out of a high-demand zone or whether the courier is already carrying a package and headed either in synch with the new request or away from it. Indeed, AIBA has a consolidation algorithm (based on detection of overlapping origin-destination pairs) that allows a single courier to manage multiple deliveries for different clients; that is, the clients are bidding on the couriers’ services, not on a single courier’s time.
The system is not actually P2P, though it looks that way to an outsider. The combination of automated booking and automated assignments to couriers, with whom the client can then communicate directly, reduces transaction costs and makes it feel P2P despite the more traditional way in which jobs are actually assigned. In the long run, we believe, the best way to solve the kinds of optimization problems it and other dispatch/fleet management/logistics systems face will probably be P2P, agent-based simulations. For now, at least, the company believes that its more traditional approach will enable it to scale well beyond its current size. But the point of all this is that P2P market mechanisms and negotiations are only a small part of the requirements for any model; you also need to represent the constraints properly. Once you have done that, the results are usually fairly easy to generate. Second, most of the negotiation here is not over terms and conditions, but before-the-fact allocation of resources managed by markets, while there’s less need for optimization of the actual routes. (The economics of couriers vs. airplanes are quite different; it makes sense to move packages a few miles one by one, whereas in air taxis (page 14) consolidation of fliers – i.e. allocation of seats on planes – is a more complex problem.)

AIBA also gives certain customers priority. For example, if a particular client has a service-level agreement with a 10-minute pickup time, AIBA will ensure that there is always a courier within 10 minutes of that client and notify control if that changes. And of course when a real exception happens – a traffic accident or a sick or missing courier – eCourier’s human dispatcher can take over, while leaving the “routine” operations to AIBA’s automated presence.

From the customer’s point of view, eCourier operates like any courier business, but an unusually flexible, well-managed and transparent one. Allowing customers to track their packages visually adds little “real” value from an economist’s point of view. . .but customer experience is a real value from a business point of view. This transparency increases trust and in fact does have a direct economic benefit by decreasing the need for human customer support. Perhaps if eCourier is able to charge premium prices over time, economists will take notice.

**Internal markets; external advantage**

The competitive advantage is that AIBA should allow eCourier to grow larger and operate more effectively than its competitors in a mature but heavily fragmented market. Conventional entrants face a classic diseconomy of scale because of increas-
ing complexity that overwhelms human controllers, says eCourier managing director Thomas Allason. “We have reengineered this market to create a company whose competitive advantage grows with every delivery [ordered],” he adds.

In the end, all AIBA can do is to reduce costs and errors. Yet its presence enables eCourier to deliver better service – beyond 100-percent accuracy – by upgrading its courier force and making them more efficient and better paid, which in turn makes them happier and nicer. As Allason says, ”Average courier pay [in London] has not increased over the last 10 years while the costs associated with being a courier – fuel, congestion charging [a special London traffic fee], and insurance – have all risen significantly. Gone are the days of professional couriers; the industry now attracts a transitory workforce with low retention rates and high turnover. Our enhanced operating margin enables us to pay our couriers substantially more than our competitors, ensuring that we are able to recruit the most professional workforce, which improves service levels in and of itself. We invest the savings made possible by our IT achievements into our team.”

Not only can Alice get real-time location reports on any courier job she booked; she can also watch as Juan the courier traverses London with her package. He’s not actually following the indicated route, which is the shortest distance and is used for billing; instead, he is going south of the river to avoid traffic (we assume). But Alice is glad she can see where Juan actually is, even though she pays only for the marked route.
Longer-run, eCourier sees its greatest opportunities in e-commerce fulfillment—currently a weak link in the supply chain, and one of the hardest things to copy because it requires execution as well as design. The company has already started developing integrated solutions with two (not yet disclosed) online businesses, who will offer same-day delivery in London through eCourier as an option on their own websites. “Same-day fulfillment is the future of e-commerce,” declares Bregman. “Consumers will use a local bookstore over Amazon when they just can’t wait. Current e-commerce systems can take orders at Internet speed but can’t deliver them until the next day. We believe this has to change.” Someday, of course, eCourier hopes to make that an option outside London, too.

**DayJet: Seat market**

It’s getting harder and harder to get from point A to point B in the US, especially if A and B aren’t near major airports. And if they are near major airports, you might wish they weren’t given all the hassles of airport parking, security and the like. If you have the choice, you may prefer Teterboro, NJ, to Newark. . .except that there’s no service to Teterboro, other than pricy private jets. Over the years, hub-and-spokes systems have grown up to channel demand from smaller airports through larger ones, where people can connect to other smaller airports. But even that system covers only about 300 airports. And overall, about 90 percent of US domestic passenger traffic begins or ends at one of only 67 airports. In many cases, for distances less than 500 miles, people simply drive. . .which can turn what should be a day trip into an overnighter.

Flying into the breach will be DayJet, launching service next year and entering a fluid market that is more used to disruption than either electric power or courier services. It operates in a different environment, and uses markets to solve a different set of problems. Energy is fairly fungible, but air travel involves the use of discrete airplanes along distinct routes at specific times. Meanwhile, unlike courier services, which are mostly unregulated and local in impact, DayJet will operate in a broad but highly regulated market and could change the industry.

If DayJet and its competitors succeed, they could change living patterns in the US (and elsewhere) as more traffic flows through hundreds or even thousands of commercial airports in the US. (This is what trains and cars did in previous centuries; if the promise of optimized use of resources, including airports, comes true, air taxis could transform hundreds of communities.)
DayJet is creating a new market based on a different model from the traditional scheduled airlines or from charter operations, which offer services to consumers on their own terms. For sure, each scheduled airline attempts to predict demand and the actions of competitors, and to offer and price its services accordingly, but operations are relatively fixed over time. At the other end of the pricing scale, planes and people stand ready to serve the needs of high-paying customers who at least in theory can cover the costs of not-very-optimized resources. In some cases, individuals own and manage their own aircraft; in yet others, a charter company operates the planes even though – financially and legally – individuals own (shares in) them; and in others, charter companies own and operate the planes and simply sell services to users at the customer’s convenience – but on the charter company’s terms. They allocate resources too, but are targeted at lower volume and higher prices.

DayJet both operates as the owner of the aircraft and sets the pricing, but the specifics of the routes, the time slots and the like – the “shape” of the market – will be discovered dynamically as consumers express their preferences. In a sense, DayJet illustrates where markets can work best – not just in the Darwinian sense of letting the “best” win, but in the complexity sense of letting multiple solutions emerge in an ecosystem of interacting parts too complex to be designed, even or especially by a central intelligence.

DayJet’s job will be to predict well enough so that its pricing and other algorithms yield an efficient market as well as profits for DayJet. Right now DayJet is working with simulations and focus groups to figure out the best set of rules for its market, but it will be ready to change policies and move resources around as it watches its marketplace of users interact.

Consumers will be able to state their requirements – from, to and when (within a range) – at DayJet’s website (after becoming a member in order to satisfy a variety of know-your-customer FAA security regulations that will allow it to operate more flexibly than a selling-to-the-public airline). “It’s a natural way for people to express their flexibility,” says founder Ed Iacobucci, who began his career at IBM in 1978, focusing on the creation of “software as a product,” before founding Citrix Systems in 1989 where he pioneered “software as a service.” Perhaps the path of his experience prefigures DayJet’s notion of the explicit definition of a service package – i.e. an origin-destination seat in a defined time window.
Time is money

“We get the customer to tell us implicitly how they value their time by how much
time they’re willing to waste – that is, their slack time,” Iacobucci says. “We calibrate
that to set our pricing.” A customer who requests a specific time for a two-hour
flight wants no slack time. One who’s willing to leave anytime within a four-hour
window is offering 2x slack time. And so on. “In the [geographical] markets we’re
looking at, the best alternative is usually three to four times the flight time on the
road,” adds Iacobucci.

It’s unclear as yet how granular – and transparent – DayJet’s pricing will be. Is it $800
for no slack time and $500 with 1x slack time, regardless of other conditions or dis-
tance? Is it per mile or per trip? Will some departure-destinations be more expensive
than others, or will everything be based on mileage? What about booking practices:
Do you get a better deal if you book early? Are you charged for cancellations? Says
Iacobucci: “For now, we’re staying neutral in terms of how we incentivize timing.
How early people make the reservation is a function of how sure they are that they
want the trip. Our aggregate rejection rate [where it cannot fill a customer request],
based on our current models, is 15 percent. It goes up as you get closer to departure.
Three days in advance, there’s about a 3 percent chance of rejection; it goes up to
about 25 percent the day before.”

Whatever approach DayJet chooses, some competitor is likely to take a different one
(local car service included? blind bargains for leisure travelers? 10-trip discounts?)
and the market (one level up) will figure out which approach works best. Of course,
DayJet and its future competitors are likely to change their pricing and other
schemes over time, keeping in mind that business customers often prefer consistency
over the last dollar. . . .

“What we learned from our focus groups,” says Iacobucci, “is that it’s important to
have predictable pricing. Many of our customers will have to have their trips
approved in advance, so they’re more interested in a fixed, predictable price than in a
bargain at the last minute. This is not for people who want to pick up and go at the
last minute, but for people who can usually plan their travel a few days in advance
but want to go where scheduled services don’t typically go.” In other words, if there’s
a scheduled nonstop to where you’re going, you should probably take it. But DayJet
is for all those routes that usually go through some expensive hub if they are served
by commercial carriers at all.
He adds, “We’re having a debate internally: Is there a premium or a discount for buying four seats on a single plane? Right now, we’re expecting more demand than supply. Even if you bought four seats at the regular rate, for example, it might be across three planes with different intermediate stops. The option of renting a whole plane is different from buying four seats." 

In short, DayJet is a glorious experiment that will be funding itself, or so its investors hope. Its software was developed and is in continual refinement by a team of 20 software engineers and PhDs in mathematics. “We’ll let the market tell us what works, instead of constructing an artificial yield-management structure. If we have a balanced system, the market will build that on its own,” says Iacobucci.

**And if you’re not a start-up with a market...**

What do these markets-inside models mean for everyone else? You might argue that traditional suppliers are dinosaurs who should just give up, but that’s not true. There are lots of ways for them to add some more market-like functions.

First of all, markets are not actually zero-sum games when constraints could be eliminated to create extra value.

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**DAYJET AND YIELD MANAGEMENT**

To some extent, DayJet is an extension of the idea of yield management. Yield management was an allocation of resources managed by the vendor, and imposed on customers as groups rather than as individuals. It lacked granularity, but in its day it was a market-changer. (See **RELEASE 1.0, FEBRUARY 1989**.)

Essentially, yield management used a variety of predictive heuristics to estimate demand for each route at particular price levels and used artificial constraints to separate price-sensitive people (who were willing to spend a Saturday night with distant relatives out of town, for example) from those who would pay up to fly at a particular time. It allocated resources more efficiently and “discovered” markets of people available at various pricing levels. Overall, it let the airlines fill planes more effectively, but it drove prices down as even the price-insensitive people started figuring out how to game the system and get the discounts.

Airline yield management has now gone to its limits and beyond. Because it is non-granular and un-individual, people take what is offered, but they don’t necessarily feel that get the deal they wanted. People sitting next to one another not only pay different rates, but do so on the basis of conditions that aren’t clear and explicit. Prices seem to change without reason, and it is a guessing game. People get the same service regardless of what they have paid, making the last-minute bookers feel like suckers, and often making the early bookers unhappy at the inflexibility they suffered because they don’t see the trade-offs. The system’s lack of visibility rather than the prices makes it an emotional negative for many customers, who can’t escape the feeling they are being taken advantage of. Without their mileage-based loyalty programs, many of the larger carriers might lose even more of their customers. Meanwhile, the newer discount airlines have flatter pricing structures, but they can’t afford to serve smaller markets.

DayJet will change all that — at least for its segment of the market. The differences in pricing will reflect constraints made explicit during the booking process, and the trade-offs will feel genuine and visible, rather than imposed by an arbitrary “big airline.”
For example, we have a long, data-filled relationship with American Airlines. Let us explore it to make a few points. We have earned more than 7 million miles over the years, and we have a lifetime AAdmirals’ Club membership. (We bought it in 1985, just before we were planning to sell our business for the first time, and expected that the new owners wouldn’t pay for such a thing. It cost about as much as a single year’s membership costs now. Not that we were that smart; we bought a similar lifetime membership with Eastern Airlines – but their life was short!)

American knows a lot about us. . .both travel patterns, and, over the years, a number of complaints and a few compliments that we sent in and which are probably on file somewhere. We’re a registered and fully tracked member of its AAdvantage mileage program. But what’s more interesting is that we know American. We know not just its prices and routes, but also its seat maps and upgrade policies. We can go to American’s site and check seat availabilities on the flights we’re considering. If there are two and one’s full and the other empty(ish), we’ll go for the empty one – better chance of an upgrade, or at least of an empty seat beside us.

Does this transparency hurt American’s ability to control its inventory? Not at all. It wants us and people like us to fill up its empty flights and reduce bumping on the full ones. It’s in American’s interest for us to be happy, and for us to benefit from upgrades to seats that would otherwise have gone empty. (Of course, if we ever paid for upgrades, American would prefer for us to do that, so it still makes those free upgrades conditional and unpredictable, driving at least the cost-insensitive customers to pay up.)

Rather than mysterious enemies engaging in inscrutable countermeasures, we are partners, trying to get customers such as ourselves the best seats possible given American’s rules and given the desires of other customers. We don’t expect American to be altruistic or to give us more than we deserve, but we trust it – because of this transparency – to do what’s in its own best long-term interest, which is to keep us as a satisfied customer. To the extent that we’re negotiating in real time, it’s not really with American but with other customers. How many people are likely to show up to claim those business-class seats? Should we go for the guaranteed, mileage-using upgrade? Or stand by for the free one? Here, it’s in American’s interest to be less than transparent and make us pay up. . .but not so often that we defect to, say, United. Priceline does the same sort of thing, but with such obscurity that consumers feel they are on the opposite side, bidding against Priceline rather than against other consumers. They don’t feel that Priceline is their ally.
How conscious is American of all this? Probably not very, or it would make it slightly easier for us to find out more information. (Whereas United allows seat selection only at time of purchase or at check-in. Guess whom we prefer!) In the meantime, we would love a shopper-side software package that would help us to navigate American’s site and grab the seat maps of the different flights we’re considering (and perhaps those of a few competitive airlines) onto a single page. In fact, we’d be happy to have a software package that would represent us in our dealings with a variety of vendors. . .and not just with airlines (SEE PAGE 27).

The message here is that transparency makes better markets. DayJet, for example, has the challenge of running a better and more-transparent market than its competitors in the under-500-mile (for now) transportation business. A better market will do two things: It will get DayJet more customers. And it will optimize the use of DayJet’s resources. DayJet’s task is to define the market and set appealing policies. Lowest real-time price may not be best; people may prefer consistent prices. Call it “transparency of the future.”

Marketers Meet Their Market

In the first half of this issue, we looked at how producers can set up markets within their user bases to avoid the burdens of control, letting markets allocate scarce resources or accommodate interacting customer demands and preferences. They are ceding control of details to markets, making money by getting their cut rather than by trying to control the specifics of each deal.

GO WEST, YOUNG BAGGAGE!

A modest proposal for aligning consumer and airline interests: Give mileage credit to lost luggage. Like most of these schemes, the details are best left to the vendors, but imagine this example. For each day your luggage is lost (up to one day counts as a full day; up to a cap of, say, 10 days), each piece of luggage earns mileage credit for the flight it should have taken. That would accomplish several goals, presumably including highlighting an airline’s superior baggage handling. But when that promise isn’t delivered, it would make the customer feel that the airline shared his pain. Of course, the airlines hate lost luggage; it’s expensive to track it and expensive to deliver it to the owner, to say nothing of the damage claims that are sometimes paid out. But most customers (especially the busy ones that the airlines want most) are simply too busy to claim what they could get, and a sour feeling persists. Getting those extra miles would help ease the pain and increase loyalty.

Would some people try to game the system and get their luggage lost on purpose? Probably, but there are ways to deter that, especially since mileage customers are easy to track (a nice example of the trade-off of anonymity for better service and diminished potential for abuse). The point here is to think positively about aligning interests.
In this second half, we consider how a broader and less voluntary change in the balance of power affects producers as market participants themselves. In particular, we look at the role of the marketers who deliver advertising messages and help consumers find products. . .or should we be blunt and say, “help sellers find buyers”? How do – and how should – marketers deliver messages to consumers. . .and how are consumers responding?

(For the purposes of this section, we use “vendors” to mean the creators and sellers of goods and services, and “marketers” to mean the people and organizations that create and place marketing messages. The “marketers” may be advertising agencies and media companies, or they may be the marketing function within a vendor company.)

Traditional consumer concerns over privacy are being superseded by concerns over data security on the one hand and resignation to the inevitable on the other. Effective marketers could do well by acknowledging all those concerns and offering more control and transparency to consumers.

Marketers believe that, metaphysically, every consumer is in search of their products. By contrast, anti-marketers think that consumers are like Little Red Riding Hood, innocently venturing forth to see grandma, but beset by deceptive wolves at every turn. If the wolf deceives Red Riding Hood and gives her everything she wants (whether she knows she wants it or not), is he really grandma in disguise? Or is he still just a wolf in grandma disguise? There’s no real answer. . .unless you ask Little Red Riding Hood herself. In the real world of legal accountability, the answer is the same: Ask the consumer. Most will tell you that it depends on the relationship they have with the wolf/grandma.

As the balance of power changes between individuals and institutions, so do the terms of engagement. Specifically, when vendors had all the power, it made sense to limit the information they got (as it still does vis a vis governments, which retain power over individuals in a way that businesses do not – other than occasionally as employers). Even now, cookies and client-side tools make it possible for consumers to take an active part in negotiations without revealing their identities.

But, as consumers become empowered, they will need to become more visible and identifiable as they request the best deal and (perhaps) bargain for custom-designed products or the allocation of scarce or specific resources (such as a plane seat) in real time.
Rather than bemoan this trend, we believe, society should charge in the other direction, and do a better job of stripping anonymity from and requiring transparency of vendors as well. We know they have our data; they have to, in order to send us things. But what data do they have and what are they doing with it? How satisfied are their other customers? Who’s the CEO and where did he come from? Consumers need to get better at penetrating the anonymity of their vendors. It needn’t be a legislative thing. Just as a consumer can refuse to do business with a website that asks too many questions, so can a consumer avoid websites that answer too few.

Furthermore, consumers need to understand that there’s no way to guarantee security – and that they are best able to stay safe by knowing whom they are dealing with. They can rely on some technology to keep themselves safe from strangers. There are more and more technologies around to deter spoofing, detect spyware and adware that may be unwanted, delete cookies and authenticate mail. But when they do want to buy something or engage in some transaction, they need to learn to ask tough questions and check reputations of their counterparts, just as vendors have been doing forever. Lack of an answer is no admission of guilt, especially in court. But in commerce, it may be a signal to go elsewhere. In order to exercise their ability to choose, consumers have to learn enough to make good choices for themselves.

Meanwhile, here’s some advice for marketers. . . .

“*You’ve got ads*”

“You’ve got ads.” Does that make you think of a disease? It should make you think of that wonderful, promising slogan “you’ve got mail” - and the title of the movie that was one of AOL’s all-time marketing coups.

But advertising has developed a bad rap, precisely because it abused the old balance of power. Regular commercials are disruptive, and often persuade people to buy things they later regret. Some adware and almost all spyware is installed deceptively, generating annoying pop-ups and sometimes causing system problems (see Release 1.0, April 2005).
For a while, marketers could get away with annoying people. But now marketers, and the online marketing industry in particular, face much more sophisticated and empowered consumers than in the past. The Internet not only supports a variety of new communication mechanisms and technologies; it has also been a channel for consumer education about how marketing works – though an imperfect one. Today’s kids know what cookies are, sort of. Today’s adults understand that advertising supports content, and they know that not all the people who send them mail are personal friends.

As consumers gain power and sophistication, they’ll start choosing which marketing mechanisms to trust. The marketers who do a better job of explaining what they are doing – and adjusting it to consumer feedback – will be the ones the consumers choose, and therefore the ones that advertisers will pay for. Consider the delight with which people talk about Amazon recommendations – and the fear with which they talk about personalization and tracking. It’s all in the message Amazon sends – and, yes, good execution.

Of course, vendors will still try to reach people who don’t want to be reached, but that will become harder and harder. We’re not saying that consumers have all the power, but they can refuse to listen (or to supply data), and they may reject channels such as adware or e-mail wholesale. In parallel with targeted marketing will be “call it targeted deflection, whereby consumers will use tools to make themselves inaccessible to certain entities. Right now those techniques are blunt weapons – wholesale cookie deletion, pop-up blocking (which blocks only browser-based pop-ups but not the more prevalent adware client-side pop-ups), spam filters and the like. But over time – if the industry does its job right – consumers will make distinctions between what they want and what they reject.

Marketers need to start marketing themselves, instead of working only in support of vendors. That means two challenges for marketing operations: figuring out how to use the technology in a way that benefits both vendors and consumers, and figuring out how to explain the benefits to consumers. Instead of collecting information, they need to persuade users to volunteer it...and then, perhaps, offer to derive it from the user’s behavior at the user’s request. (We’re a strong advocate of privacy, but we think data can help users get what they want, as long as its use is under their control.) Of course, any particular marketing firm can decide to stay only on the advertiser’s side, but the growth and the new opportunities are likely to come from services that cater – transparently – to consumers’ interests as well. Overall, the (sin-
message should be not “we are watching you” but “we are giving you the tools to identify yourself and proclaim your needs and desires and requests.”

There is certainly a surplus of goods in the civilized world. And there is also a surplus of potential media space (no matter what publishers tell you). However, there is a shortage of attention in consumers’ minds. That’s the real balance to pay attention to.

**Advertising 101**

Advertising really has two major functions: One is persuasion. As a marketer might put it, the goal is to help consumers “discover” needs they might not have known they had, and to persuade them of the putative value of particular brands. People may be persuaded by advertising to buy preventive drugs as well as cosmetics (or cigarettes), and they may learn about risks or opportunities they would have been unaware of. In some cases, this kind of information is delivered through PR rather than advertising. Other new avenues for branding include online viral marketing campaigns to create excitement, websites to deliver one’s own PR (including blogs), product placements and the like.

But here we focus on the second function of advertising, especially online advertising, which is to foster actual purchases. The goal is to offer persuasive information and perhaps purchasing functionality at a time when Juan is actually aware (or can be persuaded) of a particular need and seeking to fill it: a trip to Aspen, a sweater for Alice’s birthday, a couple of tunes for his own iPod. A marketer who reaches Juan at this moment with the right offer should delight Juan – and of course it should make a great return on whatever it paid to deliver that message at that moment.

These two approaches are not always distinct: If someone reads a direct-marketing pitch for a product he doesn’t want now, then de facto it’s a branding ad. Of course, that same ad can reduce the brand value for that consumer if he hates the ad, or if it interrupts him at the wrong time. On the other hand, a buying button can turn a branding product placement into a direct-marketing ad, for better or worse.

Thus, the direct-marketing industry (including adware) is beginning to focus on the ability to deliver Juan at just the right moment. When it succeeds, returns for the vendor go up and annoyance for the user goes down. (The user may get annoyed at the specific advertiser but also at the channel generally.) Branding ads mostly focus on demographics, but direct marketers are always hunting for signals of someone’s real-time intention to buy – as indicated by the search terms he types, the sites he
visits, the opt-ins permissions he grants or the blogs he reads. The behavioral tar-
ger, behind the scenes, is also running a market. He’s trying to optimize the use of
ad inventory and maximize yield for the advertising medium based on statistical
data, determining when to run which ads while balancing knowledge of available
advertising opportunities with target behaviors and ad pricing – trading off, say, a 20
percent propensity to click on an ad for a cheap sweater vs. a 5 percent propensity to
click for an expensive supersoft mattress, in an environment where sweater-buyers
abound but mattress-buyers are rare (and ads to them pay more). Other factors
include advertisers’ budgets and target click-through rates.

But many direct marketers are missing the changing balance of power that the most
effective advertisers, to say nothing of their customers, are beginning to see and ulti-
mately to foster. As markets become more efficient, the fact that there are surpluses of
most goods is becoming apparent, and the balance of power is shifting to consumers.

**So, what should the pitch be?**
Perhaps the direct-marketing and adware industry should redefine itself as the
direct-finding industry (or at least add that identity) and start selling itself not just
to advertisers but also to the people who actually have the money – consumers.

Companies doing so include the shopping comparison sites: EBay recently bought
shopping.com for $620 million, and Scripps just bought Shopzilla for $525 million.
Google’s Froogle and CNET Networks’ own MySimon are other players, along with
Dulance.com (in which we hold a small interest). In a somewhat different vein, but
likewise empowering, are opinion and review sites such as Epinions and
TripAdvisor. To be sure, they all generate revenues from advertisers, but the value
they offer to consumers is shopping information and targeted ads. Likewise, Sidestep
and Kayak, two travel-search services that allow users to compare offers for specific
air routes and hotels across sites, help consumers with more specific, targeted travel
searches. They do more than search; they know how to script the required dialogues
to get appropriate, trip-specific information from each site. Vendors pay for ads on
these sites, but the value Sidestep and Kayak offer is consumer-side information. In
the long run, merchants who can’t stand up to comparison-shopping information
will have a tough time competing – at least in competitive markets.

Such a domain-specific search service (whether or not it includes buying capabili-
ties) serves the basic function of ensuring that the customer is qualified (for the
marketer) and interested (for the consumer). In fact, it can work so well that con-
We wrote at length about adware in our April issue. Two big things have been happening with adware since then. First, various industry players, many of them egged on at the CNET Networks/Download.com Anti-Spyware workshop in May, are working on defining acceptable disclosure, installation and de-installation practices. The Center for Democracy and Technology and TRUSTe are both active in these initiatives. Second, the adware companies themselves are starting to improve their practices, disclose their presence to consumers in education campaigns and brand their ads, including links to “more info” and de-installation instructions. (So far, the lack of visibility often backfires. For example, we know a senior ad-industry executive who complained to us recently about “Claria” on his machine. A few days later, he came back to us with the news that it was in fact Undertone Networks and not Claria that was sending him unwanted ads. For better or worse, marketing services need to establish more clearly who they are – and who they are not.)

But ultimately, we believe, adware vendors are fighting the last war – which is to remove the aura of “unwantedness” they earned through sneaky installation practices. A victory would enable them to continue in business as payment mechanisms for free software for file-sharing and various utilities. However, that positioning is unlikely to lead to much growth (or IPOs or other exits for investors). Accreditation (even if it were available) does not equal consumer delight.

Meanwhile, advertisers may start to realize that a teenager who doesn’t want to pay for music may not want to pay for their products, either. There are fewer and fewer products that are not available for free in someone’s toolbar, on the one hand, or that consumers will not actually pay for on the other. Software vendors who have differentiable products are less likely to want to use adware to get payment, while the rest suffer strong competition from free products. A recent Pew report on spyware (see RESOURCES, PAGE 31) says that 62 percent of users say they would rather pay for products than download them for free with adware, while 21 percent would accept the adware. That doesn’t quite jibe with users’ propensity for getting things for free (and with the proliferation of adware); we assume it means that many users consider adware-supported downloads to be trials, and would pay up and remove the adware for products they like if it were easy to do so. (Of course, some are probably just loath to admit they like things for free.)

Instead, the adware companies should look at the next war – how to promote their targeting capabilities, which is what’s involved in the currently rumored interest in Claria from Microsoft. Presumably, Microsoft is interested for Claria’s BehaviorLink targeting engine, not for its ad-display capabilities, and would most likely incorporate the Claria technology as a client-side capability calling on a Microsoft-managed behavioral-targeting server.

Thus, we believe, the adware vendors should be radically changing their business model – as Claria, for one, has said it will do (Microsoft or no). Adware vendors already have the technology needed to follow users’ behavior and to give them what they may or may not know they want. But they haven’t bothered to market those skills, instead relying on mostly ineffective disclosure at best and dirty tricks at worst to get onto consumers’ machines. But now they will have to compete with a variety of other companies, most of whom have already learned how to sell rather than how to install.

Adware labs
Other than, say, a Sidestep clone or yet another shopping comparison site, what could we hope to find in the adware/direct-marketing skunkworks? In a sense, in
this age of disintermediation, even advertising is becoming unbundled and needs to be “sold” on its own merits rather than bundled in with content.

For starters, we can imagine a Microsoft ad campaign: “What would you like to buy today?” Alternatively, it could ask: “What would you like to receive today? Would you like to know what you want for your birthday? Our shopping search tool can help you figure it out, by monitoring your purchasing patterns and those of people like you. Then, we’ll automatically populate a wish list for you to send to your friends” – or display on a social networking site.

Another product could be called AdMinder: “Instead of boring irrelevant ads for products you may not want, we’ll make sure you see informative, relevant ads that reflect your interests.” Consumers are smart enough to know that they are going to see ads with most of their content, and they are beginning to understand the concept of personalization, whether of content or advertising. The tool could ask the user to fill in a profile, and offer to make educated guesses if the user finds that to be too much work. That approach asks for user consent, but pitches it in a more positive way – and actually sells the benefits, rather than devaluing them by tying the tool to some other product.

And finally, there’s the pop-up shopping comparison tool. Rather than a shopping site that you visit, this tool displays ads for products that compete with or complement the ones that you are viewing. At purchase time, the user could fill in specific flights or books or other desired purchases, and the tool could submit the proposed shopping cart to a variety of different sites. “If you buy these three books at Amazon and those five at Barnes & Noble, you will save $14.92,” the tool could say. A premium version, perhaps underwritten by Amazon, would know about Amazon’s Amazon Prime (“all you can eat” express shipping for $79 per year), which might change those calculations in Amazon’s favor. . .and a truly premium shopping tool would negotiate for a similar deal from B&N on behalf of all its users. At last the consumers may have access to the armaments that vendors have always had . . .

WhenU tried this approach long ago without much success with WhenU Shop, a destination site which mostly just triggered targeted ads, but it now plans to re-integrate this kind of consumer-oriented functionality into its core adware product to make the experience more like an automated comparison shopping tool than a straight advertising vehicle. Like Sidestep, the technology can recognize, for example, that a consumer has just selected a $400 round-trip ticket on Continental from
JFK to LAX for specific dates and times, and allow a competing airline (say Delta) to offer the consumer a seat for $50 less in real time.

This one is for real...especially now that a US appeals court has definitively declared (with Google filing an amicus curiae brief in support) that yes, it is okay for WhenU to recognize trademark A and use that to trigger an ad for product B. The fact that it is done on behalf of the consumer and might just benefit trademark owner B rather than trademark owner A – that’s very interesting economically but doesn’t make the use infringing. The law and the technology agree: The user should be in control. Hallelujah!

**Data, data, who’s got the data**

In fact, adware vendors should sell users the benefits of control, instead of hiding their activities for fear of provoking privacy activists. They aren’t very clear on the basic message: “We don’t care who you are; we just care what you buy!”

It might help, too, if they would let consumers see the data they collect. WhenU has the edge in this regard, since the data it collects is limited and stored at the client. (It uses local rules, rather than a server-side behavioral engine, to recognize trademarks such as Continental and actions such as requesting a specific itinerary.)

The other adware vendors collect more data and munge it around in a server-side data-analysis behavioral-targeting engine that may be harder to explain to end-users... But “We recommend things based on your behavior; here’s the list we have of websites or product pages you visited” would probably do the job. If a consumer wanted to edit out a particular item, that information probably would not lead to a sale anyway, so what’s the harm? (Of course, the vendors should learn a lesson from the financial institutions and keep this information secure – and anonymous.)

We often hear consumers – even those who love Amazon – complain that ever since they bought, say, “A Wrinkle in Time” for their daughter, they are getting inappropriate recommendations. In fact, Amazon has a solution, though many people are not aware of it. Next to each recommendation is a “why?” button. If you click, you see an item you purchased that led to the recommendation. Beside it is a pre-checked box which says “Use to make recommendations.” If you click it to uncheck it, that item will be deleted it from your purchase history, as far as the recommendation system is concerned.
Spyware is bad stuff, but not all one-to-one marketing technology is spyware. The advertising industry has missed the boat on explaining itself, allowing properly concerned privacy activists and the murky actions of aggressive spyware companies to set the agenda of the conversation. By trying to avoid a sensitive topic, “good” marketers have taken on the coloring of the worst of their kind.

Unlike mail-based direct marketing or CRM, which traditionally has tried to find out all about you, advertising – even online direct marketing – can be “clean.” Advertising is statistics. It does not require personally identifiable information (PII) to be effective or to be measurable. Although vendors always want to know and keep their customers, marketers know that they can market quite effectively to new customers based on product branding and customer behavior alone. Direct marketers, whether reaching potential customers through website-hosted ads with cookies, or through adware, don’t care whether you are Juan or Alice or Fred Bloggs; they just care how you behave, and especially, they care how you are likely to behave in the next few hours while they show you some enticing ads.

Marketers need to remember and publicize this fact, because adware companies in particular and online advertising in general have done a bad job of allaying user fears about PII – ironic because PII is not only unnecessary in broad advertising campaigns, but imposes wasteful overhead. Normal cookies do not contain PII (though they can be associated with it and misused, to be sure). Controlled by the user’s browser, they are sent back only to the domain that set them in the first place – which, includes, however, the domain of an ad network that places ads through the website a consumer is visiting. (Rather than a global identifier, they are in fact a unique one-to-one identifier between an individual and a particular domain.)

The value of both cookies and adware as far as privacy is concerned is that they can reach you through your machine without knowing who you are – much as an airport screener wands or feels you with no idea who you are. (Some people find that invasive; others find the ID check at check-in much worse.) Meanwhile, the benefits include not just measurability and targeting for the advertiser, but frequency capping and the reduction of irrelevant ads for the user. In addition, when you have a cookie, a site can recognize you and display your “MyPage” automatically or invite you to sign in with everything ready save your password. These are real benefits; so is the use of a cookie to save and refine a search or recall a shopping cart. The Internet, a mostly ad-supported medium, is attractive to advertisers precisely because of the ability to effectively track and measure the reach and frequency of their ads – using cookies. Without them, much of the content that is currently free would not be readily available to most users.

But, ironically, marketers have done a poor job of getting the totality of this message across and of restraining themselves. In particular, DoubleClick made a uniquely dumb move by buying Abacus with the implied plan to merge cookie information with Abacus’s offline PII. That sort of thing is why people are afraid of cookies.

**Cookies are our cause**

Right now, many consumers regularly remove cookies. At the recent Piper Jaffray conference, one teenager on a panel said she removes them daily, “because they make my computer run slower.” Adware, which installis actual executable programs on your machine, can indeed do that, either when badly written or simply because it takes up too much space, but cookies are just passive text files.

Meanwhile, marketers that place cookies (including most commercial sites) are beginning to realize that they may be more effective by making themselves visible rather than behaving as if they had something to hide.

Specifically, a new online-ad-industry coalition called Safecount is devoted to making the world safe for cookies and the measurements they provide, mostly by explaining what they are and setting up some guidelines to specify and highlight best practices. Its co-organizers are researcher Nicholas Nyhan, CEO of Dynamic Logic, a market research firm in the process of being acquired by WPP Group (of which Esther Dyson is a director) and Corey Treffiletti, senior VP at Carat Interactive, a large media buying agency. A grassroots organization rather than a trade association, Safecount now has more than 300 individual members from organizations such as Microsoft, America Online, Carat Interactive, Starcom, mOne, Digitas, Media Contacts, Millward Brown, Knowledge Networks, Doubleclick, Oracle, Cars.com, iVillage and Esurance, and is developing guidelines for cookie use, including the usual issues around disclosure, consent and removal. Companies that agree to follow the guidelines would be listed on a “Goodlist” that the organization hopes cookie-stripper software and individuals could use in deciding which cook-
ies to keep or delete. (Meanwhile, a company called United Virtualities offers the ability to retain cookie memory and reinstall deleted cookies – an unsavory capability that should be rejected by right-minded marketers.)

Says Nyhan: “We let the cookie players be confused with spyware and consumers became fearful. The industry was silent at critical times when cookies were criticized. We shouldn’t hide; we should explain how cookies work for consumers and help the anti-spyware companies separate good from bad players and practices.”

Anti-spyware vendors regularly put cookies alongside adware and spyware, since all of them monitor consumer behavior. To some small extent that is justified: Cookies are routinely placed without consumer disclosure. According to Pew, 68 percent of people surveyed now vs. 43 percent in 2000 think they know what cookies are. But more rather than fewer are removing them regularly, according to Forrester, with about 40 percent of users clearing cookies monthly or more often.

Safecount is currently working on its Goodlist guidelines. It’s likely that they will require significantly more disclosure practices by cookie setters than is currently common. But note that the guidelines would not be a lower bound on practices; rather, they would be a set of positive behaviors that would distinguish Goodlist companies from the majority – though one day we hope those practices would be standard in the majority. Broad adoption would have the salutary long-term impact of increasing trust and, ultimately, better measurement and better consumer experiences.

We hope Safecount has an impact. Cookies are some of the most benign behavior-tracking and customer-recognition tools around. If more people knew the truth, they would be less likely to delete their cookies, we believe. And they would focus their attention on things that are a problem, such as spyware and viruses.

Credit companies – by law – let you challenge data you think is inaccurate. But in this case, for low-risk marketing as opposed to high-risk extensions of credit, why be so legalistic? Don’t make them challenge it; just let them delete it. The promise is: “We’ll track the websites you visit, but you can delete them at any time.”

This may sound like a radical, crazy idea, but, one, Amazon already does it, and two, right now marketers need some radical, crazy ideas. In the future, unwanted advertising may become as unacceptable – and as easy to filter – as unwanted mail. In fact, we can imagine a browser that would recognize the websites or ad networks placing ads, and that would block ones the consumer had disallowed – both within the website’s real estate and adware-generated pop-ups. . .and so can the developers who created Firefox extensions to do just that.

A more positive variation on this approach comes from Dotomi (Disclosure: Esther Dyson is an investor), founded by Yair Goldfinger, who earlier created ICQ and sold it to AOL. Dotomi (with explicit permission from both customers and websites, who generate extra revenue from Dotomi messages) replaces generic banner ads on a websites with relevant, highly customized messages from vendors with whom the consumer has a specific relationship, such as an airline mileage membership, travel site (Orbitz and Travelocity) or a retail loyalty club account (Buy.com).

Marketers’ challenge is to promote the notion of wanted advertising. . .as master marketer Seth Godin says, all it has to do is be anticipated, personal and relevant.
**Control? What control?**

But in the future, more and more buying advice won’t come from vendors, marketers or even webmasters. It will come from the users themselves, in formats more flexible and user-defined even than current review sites such as TravelAdvisor and Epinions.

Consider del.icio.us (in which we are a small investor), and, more recently, Yahoo’s MyWeb 2.0. Del.icio.us allows people to tag Web bookmarks, which essentially means to create and publish a list of URLs tagged with a particular subject (**SEE RELEASE 1.0, FEBRUARY 2005**). The initial impetus was for users to remember things for themselves, tagging their favorite links with specific tags. But then the users started to share their tags with others. From remembering for themselves, the focus for many users has moved to publishing for or discovering from others. The concept is fairly extensible. Right now you can tag anything that has its own URL, such as a particular product. Increasingly, tags will have multiple parts and more complex structures. And why tag just URLs? There’s no reason someone couldn’t create and publish tags for all kinds of things, purchasable or not. It’s easier if you have a standard format, such as URLs or GPS coordinates or ISBN numbers for books, but tags are pretty extensible, as we discussed in **Release 1.0, February 2005**.

Now del.icio.us would never call itself a marketer, but it is certainly a place where users go to share with others and to look for products, ideas and other inspiration, at least some of which leads to the sale of goods. It’s simply that it’s not working for (or paid by) vendors of products. We’re not sure what marketers will make of all this, but del.icio.us, MyWeb 2.0 and similar services will be part of their environment.

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**COMING SOON**

- genetics, testing and health
- identity and life on the Web
- more on real-time markets
- And much more... (If you know of any good examples of the categories listed above, please let us know.)

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**The future**

In the long run, it may be measurability that saves marketers from their own worst tendencies. Devious practices don’t tend to produce good customers. Even though hoodwinked consumers may generate impressions, click-throughs and other measurable events, they are less likely to produce sales. (Of course, there will always be people selling cheap goods under false claims at inflated prices, willing to pay bottom dollar to reach the most vulnerable consumers, but that part of the market will gradually be marginalized. Offline, you can get stuck in a poor neighborhood; online, it’s easier to leave for a clean, well-lighted marketplace.)
It is becoming harder and harder to break through. Suppose a store could tell whether you are a buyer or a habitual looker. . . . A website that could make that distinction might not show you ads, but it might not let you on the site, either.

The bargain will likely become more real and more explicit. As people are tracked, even anonymously, the link between free content and advertising will become stronger. But at the same time, for consumers, the requirement that the advertising be welcome and relevant will become stronger. In the new more transparent marketplace, both sides will be free to choose.  ■ R1.0
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