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BIG MEDIA'S BIG WEB ADVENTURE

Pathfinder, *HotWired* and Ads

But what exactly was the big draw of the web? Why were people clamoring for AOL to add web access? Why had Netscape gotten a billion-dollar valuation and Microsoft revamped its entire corporate strategy? What exactly *were* people doing on the early web? Well, it was hard to say at the time, and maybe even harder to say twenty-five years later. The early web was sort of everything and nothing at the same time.

The entrepreneur and venture capitalist Chris Dixon has remarked that "the next big thing always starts out dismissed as a 'toy.' "[1] This is very often true with Internet technologies; a new site or a new tool can, on first encounter, seem gimmicky. *Why would I ever want to use/do that?* is many a first user's impression of the new. The web and the Internet itself engendered this reaction among many during its early days. At the time, the most enthusiastic net cheerleaders were touting it as a revolutionary medium that would completely change our lives. But there were still others who looked at the net and saw, yes, a toy. And we have to admit that these skeptics had a valid point of view, even with the benefit of hindsight. Because so much of the early web was decidedly amateur.

For example, one of the notorious early websites was the Netscape Fishcam, which was maintained by Lou Montulli, one of the original Mosaic six that Marc Andreessen and Jim Clark had recruited from the University of Illinois. This

was, simply, a live webcam of a fish tank. Nothing more. It still functions to this day at Fishcam.com. It had a spiritual twin in the world-famous Trojan Room coffee cam, which showed a real-time image of a coffee pot in the Computer Laboratory of the University of Cambridge, England. It was a live video feed of a coffee pot. That's it. But for people on the early web, the fact that, at any time of day or night, you could see if a coffee pot, halfway around the world, needed to be refilled, that was just—kind of cool.

The list of early web ephemera could go on and on. There was a site that translated your name into Hawaiian; Cows Caught in the Web featured bovine trivia for no particular reason; Interactive Frog Dissection allowed you to dissect a virtual frog; Doctor Fun pioneered web comics; the Ultimate Band List (formerly the Web Wide World of Music)[2] listed information on bands and concerts and indie music in general;[3] the Frank Lloyd Wright Source Page tried to catalog pictures and analyses of every work the great architect ever created; Hiram's Inner Chamber provided info on Freemasonry; if you were a fan of the nineties cartoon *Animaniacs*, the Animaniacs Page! was obsessively complete; the Bonsai Home Page was all things tiny Japanese trees. The nature of the web made publishing so simple, anyone could publish a website about anything, and lots of people did.

But there were early websites with serious utility as well. The first commercial web publication was called *Global Network Navigator*, or *GNN*. It was launched all the way back in May of 1993, under the umbrella of the technology publishing company O'Reilly & Associates. O'Reilly published computer books and manuals, and in 1992 published *The Whole Internet User's Guide and Catalog*, one of the first books about the Internet targeted to mainstream users. One O'Reilly "associate," Dale Dougherty, was tasked with creating a rudimentary website to put the online-catalog portion of the book actually, you know, online. Dougherty continued to add layers of content until it functioned as a sort of online magazine, as well as a directory, listing cool websites in one of the first attempts to bring search and discovery functions to the web.[4] GNN would eventually be swooped up by AOL during its 1994–95 buying spree of early web properties. The Bureau of Labor Statistics maintained a website very early on to provide up-to-the-minute data on labor market trends. FedEx allowed customers to track the status of package shipments before most people even knew the web existed. Alamo Rent A Car was the first to allow users to book a car from its website. BankNet in Britain was the first bank to allow online account creation (if not actual online banking). Nature's Rose Floral Services allowed you to order flowers from the web. Classifieds began

migrating to the web almost from the beginning, because for years there had been digital antecedents on the message boards and newsgroups of the early Internet and online services. The company that would eventually become Monster.com began life in 1994 as a site called The Monster Board.

Newspapers, for all their later reputation as being roadkill in the Internet Era, were actually prominent Internet pioneers as well. But then, publishers had more protodigital experience than almost anyone. For years, newspapers dreamed of electronic delivery of their product; digital would mean the elimination, or at least mitigation, of their greatest cost centers: paper, printing and physical delivery. Like the cable and telecom companies, they had sunk millions of dollars into digital experiments going back to the late 1970s. The dream of digital took its biggest step with Knight Ridder. The *San Jose Mercury News* was a Knight-Ridder publication, and it just so happened to be the hometown newspaper of Silicon Valley. Perhaps it was that proximity to the swelling tech revolution that led the *Mercury News* to launch Mercury Center in 1992. Mercury Center would offer the *Mercury News*'s regular content, but with more in-depth offerings online. It was sort of how shows or publications will now often say, "If you'd like to see the full interview, go online." Mercury Center's wares were designed to be complements to what the paper was already doing—content extensions. It carried press conference transcripts, wire stories that didn't make the printed edition, and legal documents and notices. Codes were printed at the bottom of stories so that readers could call or log in for the additional content. This cost $9.95 a month, and users without a computer could pay $2.95 a month for phone and fax service. In other words, you could have headlines read to you or faxed to your home or office. All of this was made possible via a partnership with America Online, which handled the monthly fees.

The Mercury Center was a small but genuine success. Newspapers around the country came to the *Mercury News* to see how the experiment was working out. In early 1994, the *New York Times* ran a profile on the Mercury Center noting that there had been 5,100 sign-ups, which represented a little under 20% of America Online's 30,000 subscribers in the Bay Area, albeit, less than 2% of the *Mercury News*'s 282,000 subscribers. The *New York Times* article noted that one key innovation was that reporters were urged to interact with readers about their stories. Bob Ingle, who led the Mercury Center initiative, told the *Times* reporter, "Our communication historically had been: 'We print it. You read it.' This changes everything."[5] It was a lesson that all media entrants to the Internet era would have to learn, or not learn, at their peril.

In the winter of 1994 when the Netscape Navigator browser came out, the

Mercury Center quickly embraced the web. In January 1995, the *Mercury News* launched a website, with access originally $4.95 a month, though the paywall was later dropped in an effort to land more advertisers. The Mercury Center again found small but genuine success on the web, with thousands of new subscribers and $120,000 a month in revenue by its first year. By 1997, the website could claim 1.2 million monthly visitors. Under the Mercury Center's auspices, the *Mercury News* would continue to break ground, becoming the first daily to put the entire content of a given issue online while also being the first to use the site to break news, instead of waiting for the next day's edition. In April 1995 when the Oklahoma City bombing occurred, a photograph flashed across the wires that would become iconic, that picture you might remember of a firefighter holding a child in his arms. The Mercury Center immediately posted it to the website, over the objections of the photo editor, who wanted to save it for the next day's front page.[6]

Similar experiments were taking place in the magazine industry. In 1995, the journalist and commentator Michael Kinsley launched a web-only publication for Microsoft (this was in the midst of Bill Gates's "hard-core" web obsession). Formerly an editor at *Harper's Magazine* and the *New Republic*, Kinsley very much intended the new publication, called *Slate*, to be a "magazine," complete with issues and publishing dates. In an early memo to staff, Kinsley wrote: "There should be a notional moment each week when we 'go to press' and 'hit the stands' (one and the same in this medium). I would say Friday midnight. This will allow us to summarize the week, and allow people to read us 'fresh' over the weekend."[7] Readers would be encouraged to print up articles and read them at their leisure. Within the editorial brain trust, there were actual debates over whether any normal person could be asked to read any piece over 700 words on a cathode ray screen without eye strain or boredom. At one point, Kinsley argued that each new piece or article would replace an older piece and the old piece would disappear forever. *Slate* launched with page numbers and a traditional table of contents, even though, obviously, numbering pages on the web was pointless. There were even debates about whether or not to allow hyperlinks in the articles, for fear of sending people away to other sites. Most of these callbacks to print media would be abandoned shortly after *Slate* launched.

One of the most prominent pioneers of professional online content was the 800-pound gorilla of the media landscape: Time Warner. Rising from the ashes of the information superhighway fad, the seeds of Time Warner's groundbreaking web efforts came from the failed Full Service Network project in Orlando, Florida. Some of the same personnel involved in FSN would attempt

to succeed on the web where interactive TV had failed in the home. The project would be led by Time Warner's Jim Kinsella, who would later go on to help develop MSNBC, and overseen by Walter Isaacson, now most famous for being Steve Jobs's biographer, but later also the editor of *Time*.

Time Inc.'s Pathfinder.com launched on October 24, 1994.[8] The site logged a reported 200,000 hits in its first week (back then, they called them hits) and reached 3.2 million pageviews weekly in its first year.[9] Pathfinder would have the requisite bulletin boards and chat, based on a proprietary system called WABBIT, and experiments also took place in the area of commerce, via a partnership with the ecommerce pioneer Open Market. But from the very beginning, the site was designed primarily to be a vehicle for showcasing existing Time Warner media content. Time Warner had experimented in recent years with licensing especially its magazine content to the likes of AOL and CompuServe, so, in a sense, Pathfinder was an attempt to do an end-run around the online services.

But the web was a different sort of animal, as Time Warner would learn to its great consternation. Time Warner wasn't quite comfortable with people talking back. Early on in the site's history, the O. J. Simpson case was raging and Pathfinder found huge success with an O. J. Central section where users could debate the case. But Time Warner executives feared that the free-for-all of comments and user-generated debates might expose the company liability-wise. Management slowly began to discourage community efforts. Community editors were tasked with policing community sections, discouraging users who saw their comments censored or deleted.

Attempting to cram its entire portfolio of brands into one awkwardly constructed website also proved unwieldy. Time Warner had a stable of world-class content, but instead of leveraging those brands (some of them, like *Time*, *Sports Illustrated* and CNN, among the most trusted media sources in the world), everything was cobbled together under Pathfinder's big tent. You couldn't get *People* magazine content by going to People.com. You had to go to Pathfinder.com/people. And some of the executives at these brands resented that state of affairs. For years, *People* magazine refused to mention its web presence in print, losing Pathfinder millions of dollars in free publicity. Because the various brands resented the Pathfinder umbrella, and because Time Warner had such a vicious culture of warring fiefdoms and corporate politics and infighting, the various brands tended to withhold their best content from Pathfinder. Some of the sharpest fights among management centered on how prominently to make the online masthead. "The situation really did remind me of Italian city-states,"

Bill Lessard, a Pathfinder producer, said. “A loose confederation warring against each other and against [Pathfinder].”[10]

In the end, despite being the most aggressive and well-funded early content pioneer on the web, Time Warner simply couldn’t make heads or tails of how the web could work as a publishing business. “We’re all looking at the elephant,” said Time Inc. editor in chief Norman Pearlstine at the time, “but what people think we should do depends on what part of the elephant they’re looking at.”[11] Simply by virtue of being a pioneer, and almost in spite of its own dysfunction, Pathfinder achieved a considerable degree of success in terms of audience.[12] But it was also a huge money loser just as the Full Service Network had been. Time Inc. chairman and CEO Don Logan gave Pathfinder an infamous preemptive epitaph when a reporter asked him about the site’s financial performance. Pathfinder had “given new meaning to me of the scientific term ‘black hole,’ ” he quipped.[13] Pathfinder suffered a slow, ignominious death march before being officially shuttered in 1999. Estimates for the cost to Time Warner over the course of Pathfinder’s life range from $100 million to $200 million.

Mercury Center, *Slate*, Pathfinder and the others were part of a larger process of journalists and professional media folk finding what worked and what didn’t in this new medium. On the web, you could publish something when you had something to publish, and it was instantly interactive. But the greatest lesson to learn was how to make this unruly web pay. The solution to that problem would come from another magazine dabbling in the World Wide Web, and in the process, the very business model of the larger Internet would be discovered: advertiser-supported content.

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PEOPLE LIKE TO THINK of *Wired* magazine as being the harbinger of the Internet Era; but, in fact, *Wired* predated the web going mainstream. The brainchild of Louis Rossetto and his partner, Jane Metcalfe, *Wired* revolutionized print media by embracing, as its subject, and in its very design ethos, a promised digital future of limitless possibility and technological utopianism. *Rolling Stone* for the computer era, the magazine peddled the “radical Libertarian” Rossetto’s vision of a digital revolution that would set mankind free in both physical and spiritual ways.

Wired didn’t foresee that the digital revolution it was hawking would take the form of the World Wide Web any more than Bill Gates did. Once the web began happening, however, *Wired* quickly became a vocal cheerleader and tried

to embrace the new platform in deed, not just in rhetoric. In early 1994, *Wired* hired a young financial wizard named Andrew Anker from the investment banking firm Sterling Payot, which had been instrumental in putting together the magazine's initial funding and financing. Hiring a numbers guy made sense because Anker's remit from Rossetto was to make sure whatever online experiments *Wired* dabbled in would pay for themselves.

"My mandate was: We're building a business here," Anker remembers.[14] Anker wrote a business plan and launched the new enterprise under the rubric Wired Ventures, a separate company within the Wired umbrella with Anker himself as the CEO. Anker led the development of a website called HotWired.com, which would be some mix of existing magazine content, along with original reporting and multimedia features that would attempt to take full advantage of the web's interactive nature. There was a brief flirtation with the idea of a paywall, or limiting the site to existing subscribers. But *Wired* was a magazine flush with success primarily as an advertiser-supported operation, so, the *HotWired* brain trust logically turned to the notion of merely replicating the model they already knew. It was decided that *HotWired*'s launch on the web would be sponsored by advertisers *Wired* had existing relationships with from the print side of its operation. Like the launch of a print magazine, advertisers would be asked to sponsor specific content sections of the new website for a flat fee. "$10,000 was a round number that made the numbers work," Anker remembers. "And we tried it and everybody sort of seemed to buy it."[15]

If it sounds like they were feeling around in the dark, it's because they were. Nothing like this had been attempted before. The first genuine advertisement on the World Wide Web was published by Global Network Navigator, which, in 1993, sold an ad to a Silicon Valley law firm, Heller, Ehrman, White & McAuliffe. It was text only, a glorified classified listing. Later, GNN sold the first sponsored hyperlink, pointing to a children's catalog retailer called Hand in Hand. Clicking sent a user to the company's rudimentary web page to learn more about Hand in Hand's strollers and cribs.[16]

But those experiments were simply one-off, cash-for-placement deals. The *HotWired* team was attempting something more ambitious, both technically and aesthetically. Two advertising and digital design firms, Modem Media and Organic, were brought on board and tasked with designing and selling something that felt closer to a magazine-style ad. Big. Colorful. Eye-catching. These would be the very first banner ads.

Joe McCambley was a creative executive at Modem Media. "I remember having a big debate—and we probably argued for an hour or so—about whether

or not it should even be a color ad," McCambley says. "We knew we could make it smaller [in terms of bytes] if it were black and white. We knew there was a large percentage of people out there that only had black and white monitors anyway."[17]

"At that time, you couldn't actually even center a banner," remembers Organic's Jonathan Nelson. "Everything was flush left. You would make the banners only two or three different colors. And you couldn't have complex graphics in them because everybody was on modems at the time. Bandwidth was extremely limited."[18] If a graphical ad took two minutes to download onscreen, no one would read the article, much less see the banner ad.

"The size of the ad was really created because of the size of the browser at the time, and the scroll bars on the side, and people just trying to figure out exactly what would fit," remembers Craig Kanarick, then a multimedia designer who worked on the first ads. "Somewhere around 460×60 was the right number [in pixels]."[19]

But there was an even deeper philosophical problem to solve. With magazine, radio, television, even billboard advertising, the ad merely made an "impression" on the audience. It was a passive thing. The web was decidedly not passive; the web was about links, about clicking. So, what should these new banner ads do? What would happen if users clicked on them?

"Not only were there not a lot of really big corporate websites, at the time there was really a debate whether a corporate website would actually be the thing that people wanted," says Kanarick. "Like, who would want to go to a website like Pampers, where they're just going to talk about diapers all the time?"[20]

HotWired launched on October 27, 1994, before Netscape's first beta browser, before Pathfinder, before *Slate*. And it launched with a full roster of banner ads from the likes of AT&T, Sprint, Timex, MCI, Volvo, a modem company called Zircom, as well as that infamous carbonated alcoholic beverage of the 1990s, Zima. The banner ads ran in skinny rectangles above, below and within the content. There's really no singular "first" banner ad, because all the sponsorships launched simultaneously. In retrospect, however, the advertising industry likes to think of the AT&T ad as the default "first" because the copy of the ad was certainly prescient. It read: "Have you ever clicked your mouse right here? YOU WILL."

This was part of the family of nationwide television and radio ads that AT&T was blanketing the country with that year. The TV ads, narrated by Tom

Selleck and directed by David Fincher, all had the convention of “Have you ever done x?” followed by the assurance that “You will. And the company that will bring it to you is AT&T.” So, for example, one ad had a mother tucking her children in via video-call (“Have you ever tucked your baby in from a phone booth? You will . . .”) and another showed in-car GPS navigation, pretty much as it exists today (“Have you ever crossed the country without stopping for directions? You will . . .”).

“They showed this sort of Jetsons future of the world,” says Craig Kanarick. “Many, if not all of those, have come true. But at the time it was really this sort of fantasy about how the future is going to be amazing.”[21]

The first banner ads got click-through rates in astronomical percentages. “People just clicked on anything to see what might lead them somewhere,” Joe McCambley says. “It bordered between the high 70s and low 80s[*] [in terms of click-through percentages] for about 2–3 weeks.”[22] Andrew Anker concurs: “People were clicking on every single page. And ads were just as interesting content as our content.”[23] In no time, the other media sites—Pathfinder, *Slate*, etc.—were following *HotWired*’s lead. Pathfinder would, in fact, launch with only one advertiser, AT&T, running some of the same “you will . . .” ads.

Functionally, the first banner ads were an introduction to the way the future was going to work, at least on the web. To this day, most of what we do online, with the exception of ecommerce and the rare subscription service, is all advertising-supported. It’s conceptually jarring to realize that a medium and an industry that we think of as being so futuristic and technological is sustained by a business model that is centuries old. But then, one of the very first things that the web disrupted was advertising itself, because the Internet and the web promised to revolutionize advertising in ways that marketers had only dreamed of previously.

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IT HAS ALWAYS BEEN devilishly hard to measure the actual effectiveness of advertising. John Wanamaker, the department store mogul, famously said, “Half the money I spend on advertising is wasted; the trouble is I don’t know which half.” You can pay for an ad in a magazine, but you’ll never know how many readers actually flip to that page and see the ad. And if a reader does flip to the page, how do you know if he or she actually reads the ad? The same is true for advertising on radio, television, movies, even billboards. An advertiser can buy a billboard on a highway that carries 30,000 commuters every single day. But who knows how many drivers look up and take notice? This is why advertisers have

always been obsessed with things like circulation numbers and ratings points. An ad is only effective with a small percentage of an audience in the first place, so the best way to spend money effectively is to try to reach the largest audience of likely customers.

Online advertising promised to make this vague science obsolete. Because a computer serves up webpages, on the web it is possible to know the exact number of times a web page—and with it, a given advertisement—is delivered to an audience. No more guesswork. An advertiser can know to the second, and often in real time, when their given block of 1,000 ads has been served up. Furthermore, the web allows an advertiser a better gauge of how many people ignore a given ad. Because each ad is clickable, often leading to the advertiser's own website or another traceable property, the web allows an advertiser to measure how many people interact with an advertisement. They can know how much of an impression the advertisement makes on an audience. In the language of the advertising business, this is called "engagement."

Beyond even this, there are the cookies, those little lines of software code that follow you around the Internet once you visit a website or click on a web ad. Cookies were first developed by Netscape's Lou Montulli and included in the first versions of the Navigator browser. Cookies were originally intended to add "memory" to the web, allowing users to remain logged in to sites and to refresh content so that they wouldn't be served the same thing every time they returned.[24] But publishers like *HotWired* latched on to this technology as a way to deliver targeted ads to specific audiences. What users have been frequenting windsurfing websites recently? Cookies can tell you, as well as any advertisers who want to market to windsurfing enthusiasts. Add to this the voluntary information audiences online might be willing to share with a given website. Your name, your age, sex, income, geographic location—in ways complex and yet not entirely appreciated, our online activities have delivered the holy grail of advertising from time immemorial: knowing exactly an audience's interests so that the ad man can market only to the most promising leads.

The web seemed like the advertiser's promised land. Each time a webpage was loaded, this would be counted as an "impression," for which an advertiser would pay on a CPM basis.[*] But what the advertiser was really after were the "clicks." Measuring the "click-through rate" provided a greater measurement of advertising engagement. Forget mere passive impressions, it was now possible to measure how often a user *interacted* with an ad. In the age of ecommerce, advertisers could even measure clicks that led directly to a sale. This made it easier for advertisers to calculate their return on investment by orders of

magnitude. For the first time it was possible to know which half of the advertising spend was wasted.

Another advantage of the web was how it fit into the historical advertising paradigm. There are only so many hours in a day. So, broadly speaking, advertisers are interested in how many hours of the day a given medium can capture a person's attention. How many hours a day does the average person listen to the radio? Read the newspaper? Watch television? Advertisers—especially the larger ones—apportion their overall advertising "spend" based on what percentage of a person's daily attention they can capture. The Internet represented the first new advertising medium to come along since the advent of television. As Americans came online in increasing numbers, the Internet promised to capture more and more of their time and attention. It was expected that advertisers would logically shift their advertising spend to try to advertise against this new attention center. And sure enough, the ad money chased the eyeballs. In 1995, around $50 million was spent on banner advertising on the web.[25] By 1997, online advertising passed $1 billion for the first time.[26] That was a mere rounding error compared to the $60 billion corporations spent on advertising across all mediums that year. But everyone anticipated that online ads would grab an ever-growing slice of that lucrative advertising pie.

They were right.

In 2015, digital advertising hit $59.6 billion.[27]

[*] In the modern web era, a click-through rate of 0.5% is considered a blockbuster.

[*] For decades, all advertising has been sold using a metric called CPM, or cost per mille. In Latin, *mille* means thousand, so CPM is essentially saying that an advertisement is priced based upon how many thousands of people are exposed to a given advertisement. Imagine that the total cost of running a full-page ad in a magazine is $50,000. Now, imagine that the magazine has a circulation of 4 million people. $50,000 divided by 4 million is .0125. CPM is calculated by multiplying .0125 by 1,000. So in this example, the advertisement in question has a CPM of $12.50. The advertiser is paying $12.50 to reach every thousand readers of that magazine.