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Selling the American People

Advertising, Optimization, and the Origins of Adtech

By: Lee McGuigan

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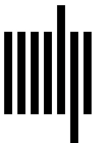
By: Lee McGuigan

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7 BUY-BUTTON FANTASIES: THE PERSISTENCE OF SHOPPABILITY

Consumers view a TV commercial and then simply press a button to buy a product—this has been one of the oldest and most widely touted features of interactive advertising.

—George Winslow

New technologies provide a fractal surface where various actors project futuristic visions and try to legitimate their power. Expectations about the economic and social potential of interactive media have been imprinted with particular force onto the policies, practices, and apparatus that make up information and communication systems in the United States.¹ Following Patrick Parsons's invitation to examine the "hopes people have for technology and how those hopes drive business decisions and public policy,"² this chapter details the persistence of one prominent theme in discussions about new media futures: shoppability. "CBS founder William Paley once said that television was the ideal selling medium," Robert McChesney and colleagues point out. "Left to Madison Avenue," they add, "the interactive digital world will be the ideal medium for closing the deal altogether."³ The construction of shoppability in discourses around cable television, telecommunications, computer electronics, and direct marketing reflected long-standing aspirations that continue to shape digital environments. This is a story about how blue-sky dreams became blueprint designs—and how those blueprints were used to powerful effect, regardless of whether the designs were actually built.

SHOPPABILITY AS AFFORDANCE

“Shoppability” is a recent term of art, but its basic premise—that items featured in advertisements and entertainment should be available for purchase—has surfaced repeatedly across the last half century. The idea is to produce consumers by building a marketplace around them, connecting personal and domestic media devices to always-on commercial environments capable of simultaneously stimulating and capitalizing on consumer desires. Pressures to tighten the link between advertising and sales, and to orient attention toward the marketing applications of information technology, have motivated many attempts to engineer interactive and, specifically, *transactive* television systems.⁴ These systems are designed to let viewers use their remote controls to buy the things they see in video content, while media companies and market intermediaries share in the revenue or collect service fees. Shoppability has now become ubiquitous on the internet. This chapter historicizes that development by examining efforts to imagine and implement transactivity via cable, satellite, and telecom TV services. It focuses on the integration of *marketing communication* and *marketplace infrastructure* in a single user touch point, illustrating the continuities and tensions that extend from modern influencer marketing back through the promise of “selling Jennifer Aniston’s sweater”—a remarkably durable slogan for envisioning shoppable media.

Shoppable television is a glamorous mess. It’s a tinsel-trimmed dream that’s hit with a spotlight whenever a new video-related technology debuts. As a practical achievement, however, shoppable TV has been plagued by technical hiccups, prohibitive costs, and reluctant consumers. Because of differences in technologies, cultural habits, and institutional and infrastructural legacies, web browsers and mobile apps have been far more successful than television as venues for shoppable entertainment and advertising. Today, ads across YouTube, Spotify, Instagram, TikTok, and many more sites and apps enable e-commerce, as do plenty of the content and interface features that surround advertisements. Social media companies increasingly position themselves as marketplace platforms where sponsors can hire content creators to integrate brands and products into authentic lifestyle performances and where followers can browse and buy from those displays.⁵ To understand these entanglements of entertainment and e-commerce, we should take a journey through some moments when old media were new.⁶

Shoppability is an “imagined affordance,”⁷ a commercial potential that marketing and media professionals have tried to activate in the convergence of television, computing, and telecommunications. It has been featured in countless stories about the exciting possibilities enabled by technological change. Those stories are revised to meet strategic challenges and opportunities, but their iterations cohere around relatively stable visions of a transactive media future, lending an appearance of inevitability to contingent and contestable developments. From this perspective, shoppability belongs to the history of cable as a new medium. When technologies are new or unsettled in meaning and usage, expectations about their trajectories can have profound, if unpredictable, consequences.⁸ Hopeful stakeholders leverage assets and advantages toward establishing legitimacy for visions of development that favor their interests and competencies, trying to harness those visions to economic, political, legal, and cultural power.⁹ Tarleton Gillespie notes that firms and industries “frame their services and technologies” in ways that help them pursue business objectives, secure regulatory privileges and protections, and “lay out a cultural imaginary within which their service makes sense.”¹⁰ As industries that are capital intensive, structured by government policy, and articulated to financial speculation, cable and telecommunications are acutely preoccupied with the future of technology. Excitement about the advertising innovations of an information age intensified during the development of cable television, reflecting cable operators’ competitive advantage of controlling a high-capacity, two-way connection into individual homes. Shoppable television became an aspirational waypoint that oriented ambitions and expectations about media convergence. It directed attention, energy, imagination, and capital toward some (and not other) possibilities for digital communications systems. The following sections identify early examples of this marketing logic and then trace its history in the cable business.

INDUSTRIAL LOGIC AND LORE

AN INTERACTIVE STOREFRONT

Marketing has figured prominently among the design values influencing the technologies and cultural forms of television in the United States. As Jonathan Gray puts it, “a commercial television industry is guided first and foremost by the desire to sell all manner of consumer goods and services.”¹¹ In the 1970s Raymond Williams recognized that within this commercial

model, interactivity would tend to be exploited for its marketing affordances. He worried that despite technical capacities to amplify civic participation, two-way TV would confront “reactive consumers” with privatized opportunities, such as “choosing an item from a shop display or from an advertisement.”¹² This turned out to be a pleasing and resilient prospect for some influential stakeholders.

In his best-selling book *The Road Ahead*, Bill Gates envisioned TV as an interactive catalog from which viewers could buy anything that appeared onscreen.¹³ By 1997, computer programmers at MIT’s Media Lab—one of whom was later put in charge of “direct-to-consumer retailing via iTV” at NBCUniversal—had designed a prototype to demonstrate that sort of interactive shopping. They called it HyperSoap.¹⁴ As Gates captured the imaginations of technologists and entrepreneurs, an analyst at an influential consultancy carried favor with marketers. In 2000 Josh Bernoff of Forrester Research predicted that television would embrace HyperSoap-style platforms “in which viewers can buy every item the actors are wearing or using.”¹⁵ HyperSoap’s name and format seemed to betray a gendered assumption that soap operas and other scripted entertainment would be felicitous venues for selling jewelry and apparel to female viewers who were emotionally invested in characters and story lines or who wished to own artifacts that connected them to admired celebrities. Attaching a desirable personality to the idea, Bernoff planted a seed that continues to attract fertilizer: viewers could buy Jennifer Aniston’s sweater.¹⁶

Selling the *Friends* star’s sweater became a trope in industry parlance, setting a hopeful benchmark for interactive TV. HyperSoap was even described in retrospect as having begun “with dreams of buying the sweater off Jennifer Aniston’s back.”¹⁷ Trade writers repeatedly invoked it as a threshold marking the dawn of entertainment-based e-commerce, and the idea is still summoned—sometimes pejoratively—at industry events.¹⁸ While the plan to sell Jennifer Aniston’s sweater disappointed expectations and, in some ways, became an icon for the failed promise of interactive TV, many marketing professionals remain possessed of the idea that television, and most other media, should be a storefront for selling merchandise featured in programming or ads. This extends an almost existential ambition for commercial media systems. As one observer puts it, “The idea of being able to cash in viewer demand for, say, the sweater Jennifer Aniston was wearing in *Friends* has been around longer than *Friends*.”¹⁹

THE DEEP ROOTS OF SHOPPABILITY

Some Americans began to use electrical media for remote shopping in the nineteenth century.²⁰ Placing delivery orders by telephone, affluent consumers or their servants could conveniently summon groceries, drugs, and dry goods from the comfort of home, sparing themselves the displeasure of encountering racialized strangers or inferior social classes in public spaces.²¹ Radio also brought the commercial world into households. American broadcasting has had marketing in its bloodstream since the 1920s, with efforts to manage consumer demand institutionalized in its economic and cultural forms. Recognizing radio's potential as a "major selling medium," national advertisers made some of the earliest sponsored programs to introduce homemakers to branded domestic products and methods for using them.²² Department stores established radio stations and orchestrated programming around merchandising priorities, sometimes broadcasting from the shop floor.²³ These urban mass merchants had already contributed to what William Leach calls the "democratization of desire," staging spectacular and intimate displays of abundance and leisure.²⁴ Radio helped them spread the imagery of consumer capitalism beyond their marble walls. One retailer reported that "listeners at home come in to see the things of which [the host] Enid Bur has spoken, with the desire to buy already created."²⁵

As early as 1944, Macy's brought this concept to television, scheduling *Tele-Shopping with Martha Manning* (later renamed *Macy's Teleshopping*) on DuMont's WABD New York.²⁶ By 1949, WTAG Worcester described its product integration strategy as "Sell-a-Vision," bragging that one sponsor "sold out its supply [of scented wrapping paper] in a matter of hours" after a broadcast.²⁷ Following the template that radio set for daytime programming, television's department store and "magazine" formats addressed themselves to "Mrs. Daytime Consumer." They not only showcased fashionable pleasures but also presented products in ways that encouraged the presumed female audience to treat viewing as part of the work of making "consumer choices for their families."²⁸

These ventures all implied that new media should be integrated into product marketing and a mode of social reproduction centered around the efficient management of private households. Broadcasting offered dramatic and seemingly personal ways to animate commodities and consumption, packaging sales efforts and consumer socialization within popular amusements. But unlike the telephone, broadcasting provided no mechanism for

initiating purchases. The construction of cable television accelerated ambitions to make the medium itself into a marketplace.

Community antenna TV (CATV) operations began distributing television signals by cable in the late 1940s. Within two decades, entrepreneurs, analysts, and policymakers recognized the prospect of delivering multiple services over an integrated wire infrastructure.²⁹ Enthusiasts predicted sweeping changes in the production and consumption of information and entertainment, culminating in a “wired nation” where cable would accommodate news delivery, telephony, home shopping, and more.³⁰ These visions could be seasoned with democratic flavors when interactive technology was interpreted as facilitating wider participation in public affairs or extending access to goods and services among people who were homebound, living with disabilities, or mistreated in retail settings because of their race, gender, appearance, or language. Certainly, the technological material was flexible enough to accommodate these values. But since affordances take shape within particular social relations and priorities, the construction of shoppability reflected the facts that the growth market for cable was upscale subscribers and the electronic media Americans used in their homes were thoroughly commercial. A 1966 article in *U.S. News and World Report* anticipated Williams’s assessment of interactive TV, speculating that “merchants will use extra channels to display their wares more fully than they can on the usual spot commercial.” A “housewife,” the article noted, can “select a dress from the television screen, electronically place her order for the dress, and direct her bank to make the payment.”³¹

Interactivity was thus often defined as transactivity, draped in familiar middle- and upper-class consumer imagery. This vision combined the democratization of desire with an impulse toward privatization and the avoidance of embodied social mixing. Whether via online shopping or the apps people use to hire on-demand chauffeurs and personal shoppers, electronic commerce continues to promise a convenient way around awkward human interactions in marketplaces or at the edges of domestic spaces.³²

Glimpses of this seductive future—like the past, only better—were greeted with exuberance. Cable went through its “blue sky” period, in which lofty plans painted an optimistic outlook for the information society. This era began in the mid-1960s but, “in one form or another, Blue Sky thinking would shape the business through its next thirty-plus years.”³³ Considerable fanfare accompanied a demonstration of two-way functionality at the

1968 convention of the National Cable Television Association (NCTA).³⁴ By the 1970s, the Federal Communications Commission (FCC) proposed new rules permitting cable operators to import distant signals into the hundred largest US markets, contingent on some stipulations, including a requirement that new systems build two-way capacity into their plant.³⁵ These proposals spurred considerable prospecting. Perceiving limited demand for a service that merely conveyed broadcasters' outputs, analysts suggested that to "realize the full potential of cable," operators would need to offer interactive features that exploited the technology's varied capacities, among which electronic shopping was consistently listed.³⁶ At the 1971 NCTA convention, FCC chairman Dean Burch warned cable operators that they could expect regulatory disfavor if they did not augment their broadcast retransmission function by offering innovative services and experimenting with "such two-way operations as shopping from the home."³⁷ That same year, a report from the Rand Corporation admitted that remote shopping was "technically feasible" but not yet economically viable. "Remote shopping would be attractive to advertisers eager to stimulate impulse buying," the report acknowledged, but it was doubtful that subscribers would share advertisers' enthusiasm.³⁸ Despite such caveats, the promise of interacting with consumers via television was becoming a fixture in the definition and development of cable.

INDUSTRIAL PROSPECTING AND PREDICAMENTS

BUILDING A BUSINESS

Soon after two-way functionality was demonstrated at the 1968 NCTA convention, stakeholders began asserting visions for an interactive television business. Already by 1970, Teleprompter Inc., the largest multiple system operator (MSO) at the time, recognized itself as a "broadband communications company."³⁹ Similarly, the vice president of Cox Cable urged the industry to exploit television's "unused capacity" by deploying shopping services and other applications.⁴⁰ Teleprompter's president saw two-way services as a beachhead for cable operators to establish themselves in the data transport and market research businesses, and he acknowledged "a tremendous opportunity for merchandising of goods."⁴¹

This tremendous opportunity became part of the cable industry's value proposition. In negotiating a franchise agreement with New York City in 1970, Teleprompter touted its development of "armchair shopping."⁴² The

next year, Telecable Inc. tested a home shopping application that featured live presentations from a Sears, Roebuck store and used an advanced home terminal to let “the housewife . . . make choices on the spot by punching the appropriate buttons.”⁴³ In 1973 Theta Cable and American Television & Communications tested interactive services, including shopping, in California and Florida, respectively.⁴⁴ Warner Cable launched its pathbreaking QUBE system in Columbus, Ohio, in 1977. Among other features, QUBE let viewers “order merchandise displayed on the screen, and even pay for it—by punching out credit card number and other required information.”⁴⁵ In 1979 a former NCTA president started a cable company to realize “the medium’s unfulfilled technological promises,” using interactive services such as shopping to expedite cable’s maturation as a general information infrastructure.⁴⁶ Cox Cable followed suit by the early 1980s, designing Indax, a two-way data exchange system that facilitated banking and shopping.

Although these services were costly and slow to materialize, futuristic promises became strategic resources for cable operators and the municipal governments that authorized system building. Interactive applications were bargaining chips in pivotal franchise negotiations during cable’s urban expansion in the 1970s and 1980s. According to L. J. Davis, “Nothing, absolutely nothing, won the hearts and minds of the targeted cities like interactive television.”⁴⁷ QUBE helped Warner Cable secure franchises in several large markets, including Dallas, Houston, Milwaukee, Pittsburgh, and Cincinnati. Reporters identified Indax as a decisive factor in Cox’s winning bids in Omaha and New Orleans.⁴⁸ Mile Hi Cablevision obtained a franchise in Denver with a proposal that included “full interactive services, including home security, shopping, and banking.”⁴⁹ And all six bidders for five franchise areas in Chicago promised home shopping and other interactive services.⁵⁰ Within just a few years, however, most of this prospecting proved more fanciful than feasible, with “beleaguered operators . . . trying to get out of agreements to provide extravagant services and facilities.”⁵¹ As cable companies postponed or abandoned the interactive offerings touted during franchise negotiations, critics alleged that the main purpose of interactivity was bargaining leverage.⁵² Interactive ambitions thus helped draw the map of cable service in at least two ways: they influenced franchising decisions that granted lasting incumbencies, and they created conditions for opportunistic MSOs to expand by absorbing overextended cable systems that had promised more than they could afford.

Well-publicized misfires helped rein in this speculation, and as the industry found its footing with satellite interconnection and a national policy set by Congress in 1984, cable became a reliable investment without resorting to exotic fantasies. Some of the energy surrounding electronic direct marketing and home shopping gravitated toward commercial online services such as CompuServe and Prodigy (a joint venture of Sears and IBM), accessed via home computers, as well as short-lived videotex services, which used television sets but tended to be associated with newspaper companies. By the end of the 1980s, a movement by telephone companies to market television services renewed shoppable TV's salience in the narrative of media convergence and its currency as a strategic asset in system building.⁵³ Lobbyists for the telecommunications industry used the promise of interactive services to justify deregulation, and after legal victories and favorable rule making, telephone companies announced plans to build video distribution systems. Some critics considered this a ruse by regional Bell operating companies trying to enter the long-distance telephone market, but these designs were nevertheless elaborate, expensive, and consequential.⁵⁴

GTE, the largest independent telephone operator (which became Verizon after its acquisition by Bell Atlantic), began testing a home shopping portal called Main Street in several markets in 1988; it then embarked on a plan to construct a fiber-optic-coaxial cable infrastructure for interactive services in California.⁵⁵ By 1994, GTE had deployed Main Street near Boston and anticipated acquiring up to seven million new customers for its interactive products over the next decade.⁵⁶ Elsewhere, Ameritech won franchises throughout the Midwest and earmarked \$29 billion over fifteen years to build hybrid fiber-optic-coaxial cable systems capable of supporting interactive shopping.⁵⁷ US West developed an "interactive mall" showcasing merchandise from Virgin Records, Nordstrom, J. C. Penney, and Ford. The venture's executive vice president distinguished it from traditional home shopping: "We are creating short-term television with an impact, and it is important to remember we're in the business of direct marketing." Planning to "combine entertainment and electronic retailing," US West imagined a future in which digital marketplaces would learn, predict, and cater to users' viewing and shopping habits.⁵⁸ Meanwhile, *Variety* called Bell Atlantic "the most aggressive" entrant into television among the regional Bell operating companies.⁵⁹ It planned to spend \$15 billion between 1993 and 2000 to equip 8.75 million homes with five "killer applications," including home

shopping and direct-response advertising.⁶⁰ Larry Ellison, CEO of Oracle, the database software firm managing Bell Atlantic's system, expressed his vision in terms of frictionless impulse buying: "You're sitting there watching the ABC News, an ad from Time Life comes on and suddenly you've got an opportunity to order the entire works of Nat King Cole on CD. One click of the button and it's yours."⁶¹

Although most of these ventures ended in retreat from video provision, in the discourses about them we see vivid impressions of the modern internet, including high-capacity servers that store digital video for on-demand retrieval, easily navigable retail portals, click-to-buy shopping, data-aveillance, and behavioral ad targeting. Telecoms' efforts to provide these information and entertainment services, evoking long-standing dreams of interactive television, influenced the building, financing, administration, and regulation of America's information infrastructure.

Cable operators knew a good act when they saw one. To outdo telephone companies, exert a competitive advantage over fledgling direct-broadcast satellite businesses, and search for new billable services to offset the subscription rate regulations Congress imposed in 1992, MSOs invested billions in plant upgrades and plotted their own adventurous schemes. In 1993 Time Warner announced plans for its Full Service Network, which is best remembered as a very expensive demonstration of video-on-demand. But another widely publicized feature let viewers use their televisions to order from Pizza Hut and make purchases from an "interactive digital shopping mall."⁶² The company claimed to be transforming the television into a platform for multimedia and commercial applications (figure 7.1). At the same time, Cox Cable implemented a large-scale test of an interactive offering in Omaha, Nebraska, that included home shopping.⁶³

Even though these experiments inflicted financial wounds and exposed the gulf between rhetorical hype and the viability of these plans, they flashed enough potential to excite an important audience of investors. Microsoft's \$1 billion investment in Comcast in 1997 signaled that Bill Gates expected cable operators to build the interactive video systems he had imagined in his recent book. *Broadcasting & Cable* applauded Gates's financial blessing as visionary: "In the past 12 months, maybe in the history of cable, no other single event has done more to highlight the industry's potential and endorse its technology."⁶⁴ The billionaire who hoped television would become a shoppable, moving-picture catalog helped position

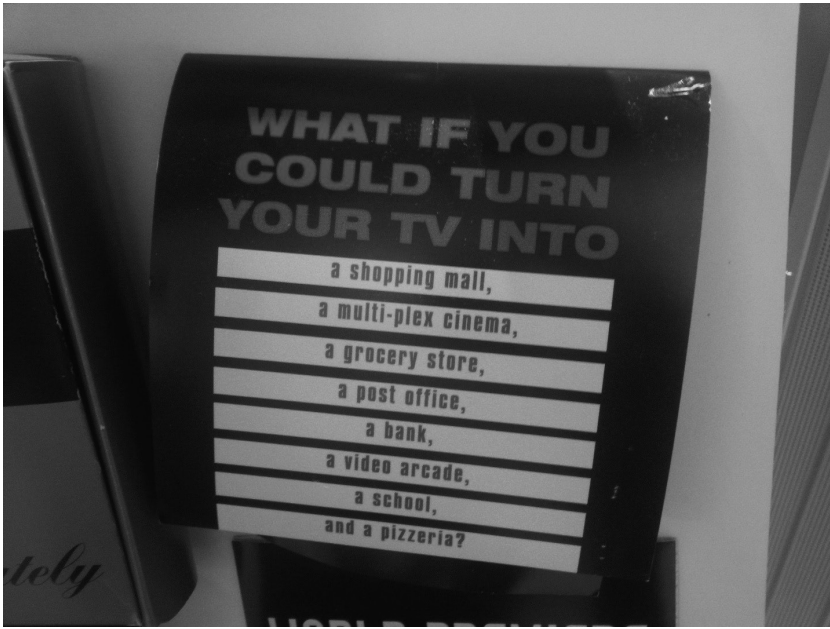


FIGURE 7.1

This promotional display for Time Warner's Full Service Network, exhibited in the equipment archive at the Cable Center's Barco Library, reiterates the vision of convergence via interactive TV that surfaced in 1970s discussions of a "wired world." (Photo by the author)

cable operators to become the dominant providers of internet service in the United States. And Microsoft saw a chance to control a critical bottleneck: the electronic equipment that would deliver a digital revolution into customers' homes.

BUILDING A BETTER BOX

Shoppability was a handy lodestone for excitement about the next generation of set-top boxes. STBs had emerged in the late 1960s as converters that enabled TV sets to receive cable transmissions from frequencies outside VHF and UHF bands. They became important instruments of control when subscription channels, tiered services, and pay-per-view offerings required cable operators to scramble signals and discriminate among customers using "addressable" systems controlled by computers at the operators' headend facilities. By the early 1970s, the cable industry recognized home

terminal equipment as a means of furnishing interactive services such as point-to-point merchandising, and venture capitalists began to exhibit interest in cable hardware.⁶⁵ Anticipation of these possibilities simmered for the next two decades before coming to a boil in the 1990s, when advances in digital technologies seemed to herald the arrival of a long-awaited future. Interactive direct marketing was presented as a central axis of revolutionary change.⁶⁶ A 1996 product brochure from leading STB maker General Instrument drew on the same blue-sky imagery that Time Warner used to promote its Full Service Network. General Instrument boasted that the “addressable intelligence” in its cutting-edge STB “turns television into a video store, shopping mall, library, brokerage house and more.”⁶⁷ Despite nagging doubts about viewers’ appetite for these new TV experiences, outfitting STBs with microprocessors and internet modems to support a suite of multimedia and marketing services was a highly publicized priority for leaders in the cable, software, and electronics industries.

The STB was being redesigned to materialize the hopes of an interactive future. It became a locus for the collision of television and networked personal computing. As an article in *Broadcasting & Cable* put it, “the set-top box is a nexus where different technologies can come together and generate new revenue.”⁶⁸ The 1990s witnessed a gold rush into STB markets, as many people expected these devices to be the main consumer gateway to an “information superhighway.”⁶⁹ The ranks of companies designing and manufacturing the apparatus for multichannel television—led by General Instrument and Scientific-Atlanta—swelled to include giants from the computer industry, notably Microsoft, Intel, IBM, Apple, and Hewlett-Packard.⁷⁰ These firms built digital components for cable, direct-broadcast satellite, and telecom operators that requested electronic shopping and other interactive capabilities.⁷¹ Tech start-ups likewise rushed to design shoppable applications. For example, Wink Communications, an early standout in television commerce, enabled viewers to click their remotes to buy CDs from musical guests on *The Tonight Show with Jay Leno*.⁷² According to the title of one consulting report, these “t-commerce” initiatives were “Turning TV Sets into Cash Registers.”⁷³

To some, this marked “a whole new phase of the cable and computer industries,” positioning television companies to tap “the home retail market, which may be worth hundreds of billions of dollars every year.”⁷⁴ TCI’s executive vice president of ad sales suggested that advertising within the “direct-response environment” enabled by digital, addressable STBs constituted “a

whole new way of using television.”⁷⁵ By the late 1990s, the perceived affordances of digital cable systems had aroused considerable excitement: “The broadband pipe is primed and advertisers are pumped up about the prospects of translating the PC ‘click through’ to the TV.”⁷⁶ Microsoft in particular looked to make itself an indispensable intermediary within this stack of technologies by using its operating system to control the STB.⁷⁷ Beyond licensing its software, Microsoft hoped to capture fees on e-commerce transactions, which were expected to skyrocket. Even in 2002, when internet browsing had settled around desktops and laptops, *Fortune* called the STB “the most valuable square of real estate in America.”⁷⁸

Analysts responded to the convergence of television and personal computing with forecasts of rapid market growth. One study projected that interactive television shopping revenue would total \$4.3 billion in 2005, with “the bulk of this buying” executed directly by remote control.⁷⁹ Other estimates were even grander.⁸⁰ But this optimism was disappointed. First of all, building an STB to actualize the dreams publicized by cable operators was difficult and expensive.⁸¹ The set-top terminals running Time Warner’s Full Service Network reportedly cost \$5,000 to \$10,000 apiece.⁸² Even in the more modest systems planned in the mid-1990s, the price tag for next-generation STBs (\$400–\$1,000) was well above the perceived threshold of viability (\$200–\$300).⁸³ Activating the capacity implied by digital STBs also required outlays for home installations and upgrades to headend facilities, and cable operators were reluctant to replace equipment that was still being amortized over its expected life span. Even for MSOs with enough scale and cash flow to absorb these expenditures, the process was complicated by the patchwork nature of their footprints, which they had built by acquiring local cable systems whose facilities varied in age, quality, and compatibility. These pressures depressed STB orders, kept manufacturing costs high, and discouraged enterprises that required mass deployment of digital equipment.

Furthermore, as an infrastructural technology, STBs were entangled with actors, institutions, and interests across industries and sectors. While shoppable television excited imaginations, STBs were designed to receive and control access to video content. Building an interactive storefront occupied an outsized place in discussions about the future of entertainment, in comparison to more pressing concerns such as program licensing, signal security, and digital video standards. Futuristic services made for good publicity, but filling the bandwidth unleashed by digital compression with

more programming was a safer bet for cable operators. Moreover, the coordination needed to stabilize a network of interoperable devices and protocols with enough scale to satisfy national marketers was undermined by proprietary dispositions among system operators, equipment makers, and software developers, each vying for the monopoly windfalls to be had if their products or services became infrastructural standards.⁸⁴ As one article admitted, TCI, Time Warner Cable, and Microsoft “have spent billions in pursuit of this Holy Grail, with next to nothing to show for it.”⁸⁵

Consumers, meanwhile, encountered clunky interfaces, a dearth of attractive interactive content, and invitations to engage with TV in unfamiliar and even unappealing ways. Asking viewers to interrupt their entertainment to go shopping was bound to annoy people. For their part, advertisers and marketers continued to face a promising but largely incoherent technical and administrative environment. Although the technologies existed to facilitate shoppable television, that potential had not been realized in industrial process or cultural habit. A cable executive with an apparent knack for understatement said, “Sometimes the dreamers dream faster than the implementers.”⁸⁶

DREAM FAST AND MAKE THINGS

Despite these stumbles, the dreamers trudged on. In 2000 Josh Bernoff speculated that viewers would soon be able to purchase Jennifer Aniston’s sweater while watching *Friends*. This had an intuitive appeal for marketers. *Friends* was a cultural phenomenon, and Jennifer Aniston was at the pinnacle of fame. But the details were sobering. For example, nobody could work out how to share sales revenue among the garment maker, the t-commerce service provider, the broadcast network, the affiliate station, the cable or direct-broadcast satellite operator, the show’s producers, and the actor herself. As skeptical observers perceived, with “too many fingers in the t-commerce pie . . . the economics of Jennifer’s sweater quickly unravel.”⁸⁷ One critic called the idea “pure rubbish,” adding, “I don’t think anyone will want to watch *Friends* to buy a sweater.”⁸⁸ Bernoff soon admitted that “t-commerce expectations have been way overblown.”⁸⁹ Nevertheless, Jennifer Aniston’s sweater became a touchstone for television’s direct-marketing future. A 2008 article in the *New York Times* called “Rachel’s sweater” a “catchphrase . . . for what devotees of interactive television are trying to accomplish.”⁹⁰ It was “blue skies” for a digital age.

The potential to enable impulse buying—minimizing the steps between introducing and consummating a purchase opportunity—was already apparent by the 1970s and was a motivating factor in designing cable systems that could support impulse pay-per-view. The vision articulated by Gates and Bernoff further captivated imaginations, aided by television’s history as a showcase for attractive goods, services, and lifestyles. Shoppability rolled right off the tongue for commercial media. “Talk about impulse buying,” exclaimed *USA Today* in 2005. “You’re watching your favorite cable channel and admire a product on the show. With a few clicks on your TV remote, it’s yours.”⁹¹ Enthusiasm swelled as digital STBs were installed in thirty-eight million homes by 2008, and interactive television, according to a Cablevision executive, was no longer the “wave of the future” but the “wave of now.”⁹² The *New York Times* observed that “cable companies are starting to slowly move” toward “the promise that consumers could instantly buy Jennifer Aniston’s sweater on ‘Friends.’”⁹³

Versions of this trope were inherited to characterize initiatives that let television viewers use “second screens” (laptops, tablets, and mobile phones) to buy products related to programs and advertisements.⁹⁴ As more TV viewing occurred within reach of internet-enabled devices, advertisers, programmers, and video distributors leveraged this connectivity to “turn any network, app, multichannel provider and TV set into a kind of home shopping network.”⁹⁵ As early as 2006, a company called Delivery Agent began operating an online tour that turned the set of the TV show *Desperate Housewives* into a shoppable showroom.⁹⁶ Shazam, a mobile app designed for music discovery, was adapted to “reinvent the 30-second spot” by allowing “viewers to buy products from mobile devices.”⁹⁷ In 2016 A+E Networks produced “the first ‘fully-shoppable’ TV series” in which every item featured on a home improvement show could be purchased from Wayfair.com.⁹⁸ Just a few years later, AT&T tried to cash in on its reach as a large mobile carrier by targeting subscribers’ phones with advertisements, coupons, or shopping opportunities related to what they were watching on TV. Brian Lesser, then CEO of AT&T’s advertising business, explained, “Imagine, you’re watching content and instead of us interrupting the content with a traditional commercial break, we can show an icon on the screen that indicates to you that there might be a mixed reality experience where you can get more information about the car you just saw or the dress you just saw.”⁹⁹ Before joining AT&T, Lesser tried to implement a similar program at Xaxis, WPP’s programmatic platform.¹⁰⁰

While these second-screen initiatives introduced another device beyond the TV and its remote control, they contributed to the project of making video content shoppable. Increased connectivity to digital marketplaces helped sustain the hope that selling merchandise directly through television devices was finally becoming mainstream, especially as firms with core competencies in electronic retailing, such as Amazon and Walmart, assumed larger roles in video distribution.¹⁰¹ Having overcome the barrier of “getting that living room connected,” Mike Fitzsimmons of Delivery Agent told CNBC in December 2015, “this idea of having a tethered experience between the content that you’re viewing and the ability to purchase is becoming a reality.”¹⁰² A year earlier, when Fitzsimmons announced that his company would deliver a shoppable H&M advertisement during the 2014 Super Bowl, he said t-commerce had realized at last “the potential associated with buying Jennifer Aniston’s sweater.”¹⁰³

Less than a year after Delivery Agent filed for chapter 11 bankruptcy protection in 2016, Fitzsimmons started another company, Connekt, to keep chasing the dream. According to a fawning company profile in *Broadcasting & Cable*, “the technology appears to have finally caught up to the idea.” By bringing t-commerce to internet-connected devices, including smart TVs and Roku boxes, “Connekt appears to have figured out how to turn viewers into instant consumers with the touch of a remote button.”¹⁰⁴

LET BUY BUTTONS BLOOM

As one writer put it recently, “frictionless consumption is big business’s wet dream.”¹⁰⁵ And it has been for a while. Shoppable ambitions course through the history of commercial media. From radio to cable to early online services like Prodigy, marketers and retailers have tried to turn new means of communication into more intensive and personalized tools of commerce. “Buy buttons” have bloomed all across the internet. A handful of intermediaries bring brands and content creators together and manage the details of compensation and order fulfillment that plagued shoppable TV. Influencers on Instagram and TikTok help merchandise the clothes, accessories, elixirs, cosmetics, and experiences they demonstrate in sponsored posts, which are often designed to give the impression that audiences can own a piece of the influencer’s lifestyle or persona. Online platforms, including Amazon, are scrambling to recruit and groom popular influencers and

surround them with the tools needed to sell the set dressings of their lives to loyal followers. The whole field of influencer marketing is too varied to summarize here, but much of it advances the familiar project of using celebrities and parasocial relationships to sell. Influencers have gravitated toward practices of authenticity, managed intimacy, and microcelebrity, yet the body types, beauty standards, and visual styles that marketers tend to invest in, as well as the top-heavy concentration of wealth and fame, exhibit as much continuity as change.¹⁰⁶

It is a fact of life that more and more of what we see online is available for sale. Huge swaths of the internet have become the interactive catalogs imagined by futurists past. As the COVID-19 pandemic forced people to do more shopping and socializing online, marketers and platform companies seized on the crisis to further entrench the shoppability of social life and enclose social commerce within their garden walls. It is a power play that leverages an active history. Journalist Shoshana Wodinsky brings that lineage into focus with the headline “TikTok Wants to Be QVC for Teens.”¹⁰⁷

CONCLUSION

This history of shoppability shows how commercial expectations framed problems and potentials for system builders, including the promoters trying to make new technologies meaningful to various publics. From the late 1960s through the 1990s, as the cable television and telecommunications industry worked to define its place in a convergent media landscape, interactive home shopping starred in seductive stories about the future of entertainment and information services. As an alluring and long-imagined consumer service, interactive shopping was a useful publicity device for a political-economic process of media convergence and marketization; it shimmered on the surface of a wave that swept through business and policymaking. These stories influenced the contours of cable’s footprint and regulatory framework and were built into hardware and software as part of an effort to position digital STBs as the domestic portal to a version of the information revolution inflected by mind-sets and structures from advertising and direct marketing. Shoppability stirred marketers’ fundamental interest in using technology to accelerate the circulation of commodities. Transactive television catered to the logic of commercial media, stated succinctly in *Advertising Age*: “The business of marketing and the business of

entertainment are fundamentally about the same thing: Turning audience attention into commerce."¹⁰⁸ The promise of selling Jennifer Aniston's sweater never fully unravels because it weaves the yarns spun from restless dreams of making any medium into a marketplace.

Specific visions of shoppable television developed more slowly than many hoped, for a variety of technical, economic, cultural, and political reasons. But it is hard to deny that the efforts to construct shoppability as an affordance of interactive media have profoundly influenced the meanings and the commercial and cultural practices associated with today's digital environments. Within the last decade, and accelerating even more in recent years, companies have spread shoppability across all sorts of media content, devices, platforms, and applications. From digital magazines to ads and entertainment on YouTube, Instagram, and TikTok, the notion that media are marketplaces is beyond dispute. Amazon now offers a reverse-image search feature, StyleSnap, that makes almost any social media post shoppable; consumers can upload a screenshot to find the same or similar products on Amazon, and affiliates of the Amazon influencer program get credit for generating sales.¹⁰⁹ With the near ubiquity of mobile phone cameras and image-recognition software powered by artificial intelligence, some marketers even turn physical surroundings into shoppable spaces. Visual search tools such as Google Lens and Lykdat let users capture images of items worn by passersby and then find online merchants selling whatever caught their eye.

The linking of media usage to shopping arouses a desire to *know* that viewers bought what they saw advertised. The next chapter examines accountability, an affordance that the advertising industry looks for in almost every new information technology that enters its field of vision and influence. Because accountability spans the whole history of advertising's calculative evolution, the chapter begins back at the midcentury inflection point, when management technique promised marketers a world they could count on.

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