

Answering the call

The device most commonly associated with the inventor Alexander Graham Bell is (dub!) the telephone. But in the 1880s, alongside the scientist Charles Tainter, Bell was hard at work on another invention that would exert enormous influence on the way people communicate.

The machine Bell and Tainter were building housed a rotating cylinder slathered in a heavy wax coating. Its surface was meant to be violated by the sharp tooth of a steel stylus. The purpose was to record and reproduce sounds, in particular those coming from a telephone.

By 1888, Bell and Tainter were manufacturing their recording machines under the name of Volta Graphophone Co. from Bridgeport, Conn., with a target market of businesses that wanted to preserve important conversations.

Enough customers were taken by the technology that a larger suitor, Columbia Graphophone Co., became interested in the budding market for business recording technology. Columbia Graphophone bought Volta's patent and, under the revised name of Dictaphone Corp., turned it into a new device for recording phone calls. By the mid-1920s, the Dictaphone Telecord product worked well enough, and had gained enough satisfied business customers, that Dictaphone believed it might appeal to residential consumers, too. After all, residential phone service had taken hold, and it seemed possible that consumers would warm to a device that would let them preserve meaningful conversations they'd had over the phone.

Unfortunately for Dictaphone, a gigantic obstacle loomed: the American Telephone & Telegraph Co. The telephone monopoly controlled the entirety of the public phone system – not just the wires that carried phone calls but, by law, any device attached to the network's termination points. AT&T honchos evaluated the Dictaphone Telecord in the late 1920s and declared it unsuitable for attachment to the phone network. Like that, any conduit for supplying the early-generation phone-recording machine to consumers vanished.

What didn't disappear, though, was the lumbering to life of the market itself – a growing interest in solving the problem of the unanswered phone call. Answering services – banks of live attendants that took calls for doctors and business owners – were growing in popularity after WWII, and in 1949, AT&T's government house-sitter, the Federal Communications Commission, for the first time allowed a small number of providers to offer automated answering machines on AT&T lines. These included a rectangular amalgamation of mechanics known as the Electronic Secretary, which used a 45-RPM record to house an outgoing message, and recorded incoming calls on a wire. Phonographic disks



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also were used in a successor machine, the Peatrophone, rented to customers by AT&T beginning in 1951 after the phone monopoly began to realize there was genuine interest in answering machines.

Yet high costs – in part a reflection of the absence of an open market – stifled the technology's adoption. Robosonics Corp. of New York introduced in the 1960s what was regarded as the sturdiest and most reliable phone answering machine yet – the Record-O-Phone – but its \$500 price made it affordable only for businesses.

The breakthrough for consumer-accessible telephone answering systems came about because of two important changes to policy governing the phone system. The first was the FCC's 1968 Carterfone decision, in which the Commission overturned tariffs that had prevented outsiders from attaching new devices to the phone network. The breakup of the AT&T system under a Justice Department consent decree in 1984 provided another catapult for the answering machine category, as customers by then had unfettered choice in buying their own telephones and add-on equipment. According to Recording History (www.recording-history.org), an informative Web site maintained by author David Morton, manufacturers sold more than 1 million answering machines annually beginning in 1984, as the twin benefits of a free-for-all marketplace – expanding feature sets and declining prices – took hold.

The explosion in answering-machine popularity (and the uprising of its successor, digital voice-mail storage and retrieval) is taken by free-market theorists as proof that innovation and its attendant consumer benefits occurs when multiple participants are able to duke it out in markets unfettered by protective regulations. That theory will be tested beginning this month in the cable home-equipment space as new federal rules designed to bust open the cable set-top marketplace become effective. Whether the new rules will unleash massive new markets for innovative devices like phone answering machines is anybody's guess. But if there's a new-generation Alexander Graham Bell out there tinkering with possibilities, at the very least the guy has a better shot than ever before.