INTERNET
MARKETING

READINGS AND ONLINE RESOURCES

e-commerce

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INTERNET MARKETING
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PREFACE

The Internet continues to grow at exponential rates in the United States and around the world. In 1998 there were some 2.8 million websites on the Internet. By the beginning of 2000 this number had increased to over 9 million. E-commerce revenues are forecasted to increase tenfold between 1998 and 2003. This astonishing pace of change has given rise to the expression that "one Internet year is equal to three months."

For the student of Internet marketing, the key challenge is to not only master Internet marketing principles and concepts but to stay abreast of technological advances and industry trends. Professors likewise require teaching resources that maintain relevancy in the classroom over time. Toward this end, we offer the first "nonperishable," integrated approach to Internet marketing education. Our approach to the subject consists of **three reinforcing components.**

Component One stresses understanding of Internet marketing theory and concepts. To achieve this, we turn to current, important, and interesting research conducted by acknowledged masters of the field, including Dr. Hanson of Stanford University, Professors Hoffman and Novak of Vanderbilt University, Dr. Kaplan of the University of Chicago, Dr. Maes of the Massachusetts Institute of Technology, Dr. Sawhney of Northwestern University, and Dr. Varian of the University of California, Berkeley—to name just a few. In addition, the book's website and a free electronic newsletter keep the student and professor informed of breakthrough academic research as it is published between editions.

Component Two shows how concepts are applied in the real world. A website companion to the book (http://www.mhhe.com/richardson01) provides students with hundreds of links to industry news, articles, forecasts, software demonstrations, e-commerce tutorials, and directories relevant to each chapter module. By visiting these resources, students see firsthand how Internet marketing theory is applied using the latest techniques and best practices. These online resources are updated and revised on a continual basis to ensure high relevancy and interest.
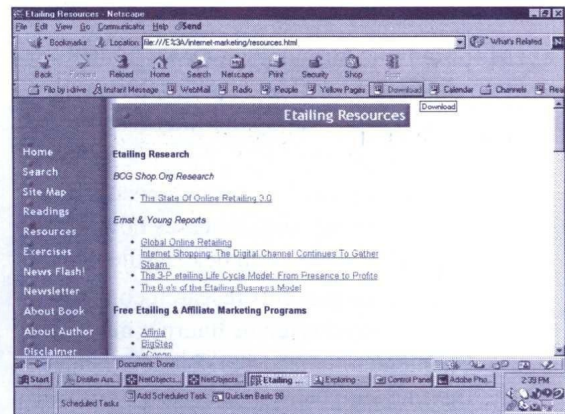
Component Three stresses the development of advanced Internet marketing abilities and skills. At the end of each module, students are asked to

perform a series of exercises. By completing these exercises, students master the latest cutting-edge Internet marketing techniques. Students learn, for example, how to evaluate web business models and measure website quality, how to create web advertising programs and calculate advertising ROI, how to "e-commerce enable" websites for payment processing and implement closed loop promotional programs, how to conduct competitor analyses and improve search engine positioning—to name just a few! These online exercises are updated on a continual basis to ensure relevancy for students.
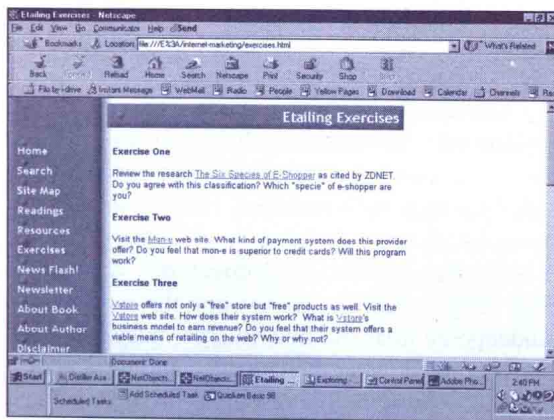
The course is arranged into twelve chapters in a modular fashion.

Module One introduces students to the Internet and shows how leading firms are successfully integrating the Internet into their business processes.

Module Two provides foundations of Internet marketing and discusses how commercial websites can be classified.

Module Three presents research concerning the business-to-consumer Internet marketing environment and discusses characteristics of the Internet shopper.

Module Four describes how electronic shopping agents and robots are influencing consumer behavior online.

Module Five presents research concerning Internet advertising and web marketing communications.

Module Six discusses key issues related to interactivity and community and how these factors drive website quality.

Module Seven describes the rise of business-to-business marketing on the web and shows the various B2B models that are emerging.

Module Eight describes how the Internet is impacting the marketing research process.

Module Nine discusses the Internet and international marketing.

Module Ten presents research concerning the Internet and public policy.

Module Eleven discusses how the Internet presents special challenges for the pricing and delivery of information and informational components of products and services.

Module Twelve is a bonus online module that presents examples of winning strategic Internet marketing plans and links to decision tools and resources for Internet entrepreneurs and startups.

Professors will be pleased with the extensive teaching support available through the website at http://www.mhhe.com/richardson01. The website resources, content, and exercises have been developed and exhaustively tested by the author in his own undergraduate and MBA Internet marketing classes. In addition, the pedagogical approach—which mixes offline articles with online resources—has been evaluated in real classroom environments with great success over a period of four years. Instructor resources on the website include PowerPoint slides for each module and an Instructor's Manual with answers to online exercises, suggested syllabi, and teaching tips. Finally, a free course electronic newsletter and continual website updates keep course content fresh and interesting for all.

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INTRODUCTION TO INTERNET MARKETING

From humble beginnings as a modest U.S. government project, the Internet has exploded on the world stage. The world's first multimedia web browser, Mosaic, was developed in 1994. Since this time, the Internet has grown faster than any medium or technology in history. However, even in this short period of time, we are witnessing three distinct revolutions.

The first Internet revolution is characterized by rapid growth in the business-to-consumer market. Amazon.com pioneered retailing on the Internet. Yahoo! defined the emerging role of cybermediaries. eBay created the world's largest consumer-to-consumer auction market. Priceline showed how consumer power could force airlines and other service providers to bid for business. Business-to-consumer revenue growth continues unabated.

The second Internet revolution is characterized by even faster growth than the first. This second revolution focuses on the business-to-business market. Ariba and CommerceOne are creating global web-based electronic procurement portals for industrial operating supplies and parts. Freemarkets.com and Vertical.Net have established the viability of business-to-business auctions for a variety of industrial commodities and products. HoustonStreet.com and Arbinet are among the world's first pioneers of successful Internet exchanges.

The third revolution is occurring within the firm itself. Private web sites called intranets and extranets are transforming corporate relationships. Intranets are designed for internal marketing purposes. Intranets have grown from simple web sites hosting corporate communication information to sophisticated internal portals for sales force training, expense and timesheet reporting, collaboration, and knowledge

management among employees. Extranets are used to manage vendor, partner, and customer relationships. Through the use of extranets, firms may automatically procure needed supplies or manufacturing parts, collaborate with vendors and partners on project designs, and offer preferential pricing or terms to preferred channel members.

In this way, the web is transforming customer, supplier, and employee relationships.

What will we witness in the fourth revolution? Are the signs already here? Probably. In the first article in this chapter, Dr. Ward Hanson suggests that the growth of the web is remarkably similar to the growth of the radio. In both markets, there was initial ambiguity regarding the appropriate application of the technology followed by unexpected and rapid consumer adoption. Only after a shake-out and some chaos did successful business models emerge.

In the second article, Dr. Haeckel states that the Internet and related technologies are creating a new form of interactive marketing. Professor Haeckel suggests that new technologies are often adopted first to increase efficiency and then to increase effectiveness. Later, the technologies are applied in ways that were inconceivable at the time of original adoption. Dr. Haeckel suggests ways to imagine where technologies such as the Internet may lead us in the future.

Finally, in the third article, Mr. Quinn compares business environments to ecosystems. Just as creatures need air, water, and food, businesses need effective marketing, sales, and fulfillment. Mr. Quinn suggests that the Internet must be integrated into the marketing, sales, and fulfillment business ecosystem in a way that enhances the unique strengths of the firm. Quinn provides several case studies of leading firms that have been successful with their integration efforts.

Please visit the textbook's web site, where you will find supporting resources and exercises.

Ward Hanson

How do you evaluate a technology that has completely captured the public's imagination? A technology perceived as so rich in promise that thousands of articles in newspapers and magazines explain its workings to their readers. A technology that has come to indicate innovativeness, where failure to appreciate it is taken as a sure sign of belonging to the wrong side of a generational divide. Which has led, almost overnight, to the creation of new companies, brands, industries, and fortunes. One that commentators claim will revolutionize not only public culture, but also education and commerce. And, in moments of excess, a technology hailed as the best new chance for creating a peaceful world.

Such a dilemma confronted the radio analyst in 1922. The technology was the original WWW, World Wide Wireless. When the RCA Corporation took this logo in 1920, it felt that its new technology promised profits and a reasonable business opportunity in the wireless provision of telegraphy. In 1922 radio suddenly transitioned from a low-cost niche alternative to transcontinental cable to a consumer phenomenon. It was "top of the charts," and seemed to point the very way to the future.

Radio created much more than just a product or an industry. Although it now seems hardly more than a useful appliance, the impact of radio in the 1920s was huge. It changed the way the average person thought about distance and time. Listeners now heard global events as they happened. Performances in distant cities appeared instantly in the neighbor's living room. Fast breaking stories, or simply news about impending weather, was available with a flip of the switch.

Radio caused a wide range of spillovers and changes in the conduct of business. Radio dramatically accelerated the economy's push to a mass market. New national brands sprung up. A firm could launch marketing campaigns across the country simultaneously, backed with a nationally created image.

As part of this transformation, we suddenly had the concept of scheduled mass culture. As early as 1923 the Happiness Boys had become famous as "your Friday night date, from seven thirty to eight" (Smulyan, 1994, p. 93). Time slots, lead-ins, and prime time became familiar concepts. This change in the everyday life of millions of listeners affected every aspect of their lives, from church attendance to newspaper reading (Lazarsfeld, 1940).

In making the transition from hobby to industry, radio struggled with the most fundamental requirement of any technology: generating a self-sustaining revenue base. This was neither a smooth transition nor one with which participants felt comfortable. There were major differences and competing visions of the future. There was explosive growth and there were captivating possibilities. Even in the heady early days there was a gnawing awareness that the sources of fascination and growth fueling the early days could not last, and that a more permanent basis of support was needed. There were times participants felt the industry might be lagging, with the luster gone and the difficulties still present. There was both satisfaction and deep disappointment in the way the commercial foundations developed.

Modern-day participants in a similar evolution, the commercial growth of the World Wide Web, can learn much from the early days of radio. There have been striking parallels in the timing of investment, the concerns surrounding the financial basis of content, and the importance that popular fascination can play in stimulating the takeoff of a new medium. Jobs (1996) noted:

The Web is going to be very important. Is it going to be a life-changing event for millions of people? No. I mean, maybe. But it's not an assured Yes at this point. And it'll probably creep up on people. It's certainly not going to be like the first time somebody saw a television. It's certainly not going to be as profound as when someone in Nebraska first heard a radio broadcast. It not going to be that profound.

There are likely to be further parallels as well. Radio's experience of shakeouts and eventual maturity seems to be especially relevant.

RADIO'S COMMERCIAL BEGINNINGS IN AMERICA

Radio was originally known as wireless telegraphy or wireless telephony, a reflection of its main early market. Between the original innovations in 1897 and the outbreak of World War I, the British Marconi interests created a global capability for wireless messaging, which effectively competed against telephones and telegraphy. Key markets were those where it was either expensive or impossible to lay a cable; between ships, from ship to shore, across a long expanse of difficult terrain, and through undeveloped areas.

Radio telephony's commercialization showed many of the characteristics expected of a network technology. A single company, Marconi, emerged as the de facto standard. Central to their success were first-mover advantages, investment ahead of demand, and a growing stable of protective patents.

World War I disrupted this commercial dominance. During the war many combatants nationalized and controlled the use of radio. This military application froze the commercial side of things, but also created many of the preconditions for the explosive growth of radio that happened in the 1920s. Numerous technical improvements in broadcast and reception sensitivity owed their

existence to military needs for distance or miniaturization. Perhaps most importantly, it created a cadre of technically trained people who did not forget their skills when they returned to civilian life. This created a considerable pool of skilled amateurs, willing to continue using radio as an interesting hobby and potential career.

As the world emerged from global conflict it appeared that Marconi would be able to reestablish its almost complete control over this wireless global communications medium. However, as part of negotiations following the end of the war, elements of the U.S. government came to demand an end of British control over this strategic asset. This led, in 1919, to the forced sale of American Marconi assets and patents to the Westinghouse Company. (Archer, 1926; Archer, 1939; Jome, 1925)

It quickly became apparent that successful radio development required alliances. Several companies owned key technological advances. General Electric controlled vital patents in areas of both radio transmission and reception. The Bell System controlled key patents on vacuum tube technology, which made amplification of signals and quality reception feasible for the first time. United Fruit had been active early in using radio to communicate with its Central American plantations, and had vital technology for powerful broadcasting.

These companies created the Radio Corporation of America, as the sole legitimate seller of radio reception equipment. Stock ownership

TABLE 1.1	RCA Ownership 1921		
Partner	Common	Preferred	Percent of Total
GE	2,364,826	620,800	30.1%
Westinghouse	1,000,000	1,000,000	20.6
AT&T	500,000	500,000	10.3
United Fruit	200,000	200,000	4.1
Others/Public	1,667,174	1,635,174	34.9

cemented the alliance. Table 1.1 shows the RCA ownership structure.

Wireless telephony and telegraphy resumed their growth following the lifting of World War I restrictions. Table 1.2 shows the breakdown for the world messaging radio industry in this early post-war period. By June of 1921, there were over 23,000 wireless stations in the world committed to wireless telegraphy and telephony (Jome, 1925, p. 69). Radio was again a viable industry.

RCA executives of the time viewed their market as based on one-to-one or one-to-few communication, in competition with submarine cables. These wireless markets did develop, and formed a profitable and increasing market for RCA. Transoceanic communication revenues were $2.1 million in 1921, with half a million from marine service. (David Sarnoff, a leading executive of RCA, owed part of his fame to this marine connection. While still a teenager, he was the sole radio operator on call when the messages about the sinking of the Titanic started to arrive. It was Sarnoff who relayed the messages to the newspapers.)

RCA's early venture used a well-understood revenue model, fee for service. Each message had a price; either the sender or the recipient could pay. As messages always had a pair of interested parties, there was no problem in assigning benefits and charges or excluding nonpaying customers.

RCA's value proposition was clear. High-power radio broadcast facilities had the capability for low-cost communication to Europe, Asia, and South America. For example, the 1920 standard wire-based telegraph rates to England were 25 cents per word. The cost to Norway was 35 cents. RCA undercut this price by approximately 30%, to secure a valuable but relatively modest niche market.

This focus on wireless messaging provides us with our first lesson from the radio story. Highly involved company and industry participants are often surprised by fundamentally new sources of growth in their markets. While visionary exceptions can usually be found, the mainstream participants are commonly caught short by what is later realized to be a basic sea change in use. (David Sarnoff received large amounts of praise for his prescient forecast of the capabilities of the consumer market in radio generating huge amounts of sales in the 1922–1924 time period. In late 1920 he had forecast RCA unit sales to follow a growth path of 100,000 units in 1922, 300,000 in 1923, and 600,000 in 1924. His revenue projections were $7.5 million, $22.5 million and $45 million, respectively. RCA's actual sales for those years corresponded to $11 million, $22.5 million, and $50 million. This is quite amazing in its insight— although Sarnoff was also known for making numerous forecasts that were not nearly so accurate.

TABLE 1.2	Classification of Wireless Stations				
	1920	**1921**	**1922**	**1923**	**1924**
Amateurs	5,922	10,809	15,504	16,570	15,545
Special land	164	383	525	566	665
U.S. commercial—land	94	139	185	236	289
U.S. commercial—ship	2,808	2,978	2,773	2,723	2,741
Government stations	1,574	1,385	1,478	1,299	1,249
Foreign stations	6,842	8,154	11,462	11,349	11,979
Broadcast (U.S. only)	—	—	382	573	535
Total	17,404	23,848	32,309	33,316	33,003

TABLE 1.3	Purposes of Broadcasters 1924		
Incentive for Launching Radio Station	**Total**	**Only Purpose**	**1 of 2 or More Purposes**
1. To help maintain sale of receiving sets	31	2	29
2. To profit from goodwill developed	44	8	36
3. To profit by direct sale of advertising time	2	0	2
4. To serve public generally	146	46	100
5. To serve some special group or clientele	26	6	20
6. Research purposes	13	4	9
7. Police information	8	2	6
8. University extension work	1	1	0

However, as the Annual Report quote makes clear, the established wisdom at RCA was not anywhere as rosy as was Sarnoff's.)

BROADCASTING AND THE EUPHORIA OF 1912

A fundamental change in the radio industry occurred in 1922. During that year the commercial role of radio made a transition from point-to-point communication to broadcast. Just as fundamentally, it made a transition from a clear-cut business model to a situation where industry participants knew there was incredible demand but couldn't see how to collect revenue.

At first it didn't matter. Merely the presence of a radio station in a town created a rush to buy radio sets. Radio receiver sales in 1922 quickly dwarfed revenues from all other of RCA's lines of business combined. This was a surprise to many of the participants. Even the most interested parties, such as RCA, expressed amazement and shock at how fast the market exploded. The 1922 Annual Report of RCA commented:

> "At the time your Corporation was formed in 1919, for the purpose of building up a world-wide international wireless communication system, wireless telephony had not passed out of the experimental stage, and it was not at that time foreseen that the broadcasting art would ever reach the high point of popularity that it has in the last year. The engineers and scientists had anticipated the development of wireless telephony for communication purposes, but no one had visualized the phenomenal expansion of wireless telephony as used today for broadcasting.
>
> In the last year the number of broadcasting stations has grown from less than twenty to almost six hundred. The art itself is advancing very fast, and the ultimate effect of broadcasting upon the economic, social, religious, political, educational life of the country and the world, is comparable only with that of the discovery of printing 500 years ago."

Figure 1-1 shows how lucrative the sale of receiver equipment was. By 1922, RCA radio sales exceeded $10 million. It doubled to more than $20 million in 1923; it doubled again to over $50 million in 1924. Industry sales for radio receivers followed a similar pattern of doubling. They mushroomed to $60 million in 1922, $136 million by 1923, and an amazing $358 million in sales in 1924.

What makes this level of sales so remarkable is the rudimentary state of radio receivers during this time of extraordinary growth. It was not until 1924 that radios were sold with wall plugs. Radio users

had to struggle with heavy batteries, typically 12-volt lead acid. Next, there were no speakers. All listening had to take place with earphones. Acceptable reception required an extensive antenna system. This made radio listening a complicated—and in a summer thunderstorm, potentially dangerous—pastime.

Less obvious is the difficulty most of these sets had in locking on to signals. Indeed, there was a constant need to "comb the ether" to keep a weak signal connected. All too often this signal was also varying, as improperly configured broadcast stations would wander around their basic frequency.

Frequency sharing by stations was common. This necessitated extensive time sharing arrangements between regional broadcasters to avoid mutual jamming of each other's signal. Local newspapers published extensive listening and time guides. High-power stations would follow low power stations, causing listener discomfort and a rush to control the volume.

Why spend so much money on a flimsy, hard-to-use gadget? The first part of that answer is the very rapid growth of stations throughout the country [Table 1.3]. During this era essentially anyone wishing to launch a radio station could do so. The regulatory agency with any jurisdiction over the granting of licenses in the U.S. was the Commerce Department. In 1926 the Secretary of Commerce's power was strengthened, and Hoover could take a more restrictive or directive role in assigning or denying station license petitions; but until then the department's regulatory power was very weak. Commerce was essentially compelled to grant a unique set of call letters and an operating license to anyone who requested and maintained a station. For the critical window of 1922–1926 anyone believing that they could benefit and profit from a radio station could enter the market.

Many chose to do so. In 1922 it seemed that broadcast stations were appearing every day, with wonderfully creative and adventurous uses of the time they had available. By the end of 1922, the first real year of broadcasting, there were 576 broadcasting stations in the U.S. These early stations were a mixture of amateurs, speculators, nonprofit centers such as universities, companies looking for goodwill from sponsorship, and radio manufacturers and retailers looking to further seed and promote the sales of radios.

But the real driver of both set sales and broadcasting stations was the combination of hype, media coverage, and public fascination that came to be called the "Euphoria of 1922." Popular discussion of radio was everywhere. This ran from newspaper accounts of any new radio station opening up to the achievement of some new record for distance listening, from technical pieces in journals describing new radio developments to get-rich-quick schemes popping up in investment circles.

The intellectual as well as the popular media were full of analysis and insights around the long-term impacts of this amazing new technology. Hot debates emerged on the impact of radio on education, the music industry, politics, church attendance, and global understanding. The fundamental value of social interaction was questioned. Why leave the privacy of one's own living room when many cultural events could be experienced for free?

The impact of three forces propelled the explosion of radio: rapid radio set sales, mushrooming growth in signal sources, and intense public attention. This is a powerful, autocatalytic process. Fascination leads to sales, sales lead to stations, new stations lead to more fascination.

The intensity of attention showered on the World Wide Web in 1995–1997, the explosion of servers (i.e., "broadcasters"), and the rapid expansion of Web connections and browser use (i.e., "receivers") is highly reminiscent of radio in 1922–1923. It is also highly likely that observers 10 or 20 years from now will look back at the features, bandwidth, connection difficulties, and general "kludginess" of Internet technology with bemusement and incredulity. But at the same time, it is unlikely that the level of societal focus will ever be as high. We may already have seen the peak of the Web positive feedback loop—but nowhere near the peak of its economic or true social impact.
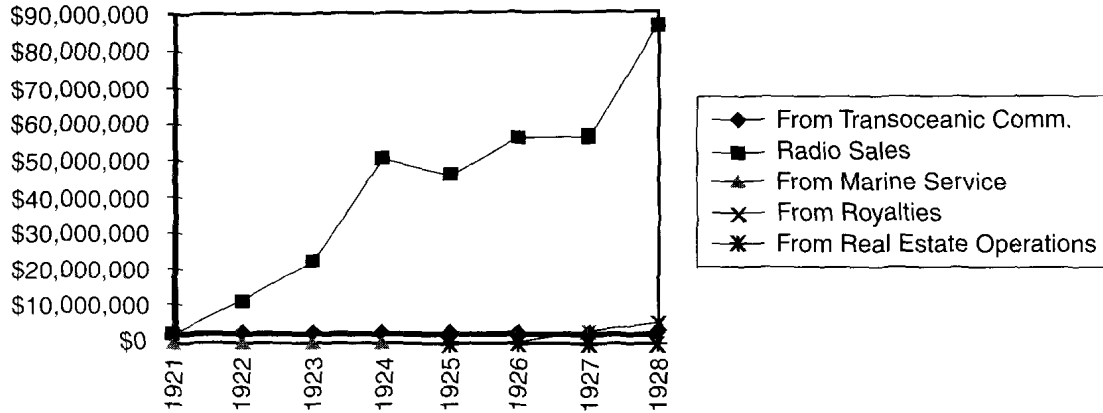
Figure 1-1   Sources of RCA Revenue: 1921–1928

SHAKEOUTS AND BUSINESS MODELS

The 23,848 radio stations in existence in 1921 were for two-way communication. The broadcast revolution dramatically changed this. Suddenly there were millions of receivers. While the number of broadcasting stations during this period never exceeded 1,000, the number of receiving sets expanded to dwarf the number used in all previous applications. This one-to-many structure meant that the message sent needed to be sufficiently general that a widespread group of listeners would benefit. But the public good nature of the radio signal meant that the old model of pricing by individual message no longer worked.

Broadcast radio was a fundamental change in the business use of radio. The revenue model for direct communication was clear-cut. Broadcast was a puzzle of indirect communication. High quality content requires revenue. Pay-as-you-go was infeasible. Somehow third parties must support the effort.

At first the goals of broadcasters were a combination of hard-headed good business, wild-eyed speculation, and public-spirited altruism. Fortunately, a researcher captured this spread with a study conducted in 1924.

Several striking features are present in this survey. First is the role of the major radio "hardware" companies. They were among the key sponsors of many stations. The logic and benefit is simple—people will buy radios only if they have something to listen to. With a sufficiently large share of the market, key manufacturers and retailers will find it profitable to engage in category development.

Generalized goodwill was a common motive. Many early radio sponsors were well-known department stores, car dealers, or newspapers. Their names would occasionally be mentioned, merged into the name of the show, or even made part of the call letters. Among the leading shows were the Eveready Hour, the Happiness Boys, and the Michelin Troubadours. (This was eventually spoofed on the floor of Congress by Representative Emmanuel Celler of New York, introducing a bill to the House: "This is BLAA, broadcasting station of the Jumbo Peanut Company at Newark, New Jersey. You will now have the pleasure of listening to the *Walk Up One Flight Clothing Company's* orchestra. Their first number will be *You Don't Wear Them Out if You Don't Sit Down.*") In Chicago, the Chicago Tribune sponsored the radio station WGN—the World's Greatest Newspaper.