

TUNE IN. IT'S THE RADIO



Nothing sparks your imagination like words - written or spoken. The age of information that we are in, every stimulus we get is visual. There is little room for imagination. Or is there? Well, all you need is a book. Or, a radio. Yes, a radio



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Radio as we know it has evolved through a multitude of changes, from the very seed of an idea in the second half of 19th century to when radio broadcasting became a reality in the beginning of 20th century, several generations of inventors and scientists have worked on it; and the story of radio has unfolded decade over decade, constantly transforming, even to this day.

Birth of radio

There are many who have contributed to the medium directly or indirectly. Beginning with the Scottish physicist James Clerk Maxwell who brought to light the existence of radio waves and Mahlon Loomis, an American dentist who demonstrated the first known instance of wireless aerial communication in the 1860s. Twenty years later, it was Heinrich Rudolph Hertz who proved the existence of these waves. Another 20 years went by, during which time these waves that were to be used for wireless communication were quite simply known as *Hertzian Waves*. For, the term 'Radio' hadn't even been coined yet.

Then there was Reginald Fessenden of Canada, credited for AM (Amplitude Modulation) Radio, a radio where more than one station could simultaneously send signals. He is also known for the first transmission of audio over radio. He was the first to make a long distance public radio broadcast of music and voice in early 1900s. And there was Alexander Popov, the Russian physicist, who invented one of the first radio receivers. Also William Dubilier, the American inventor who used the first mica capacitors and demonstrated radio communication, 10 years after which the first commercial radio station came into operation.

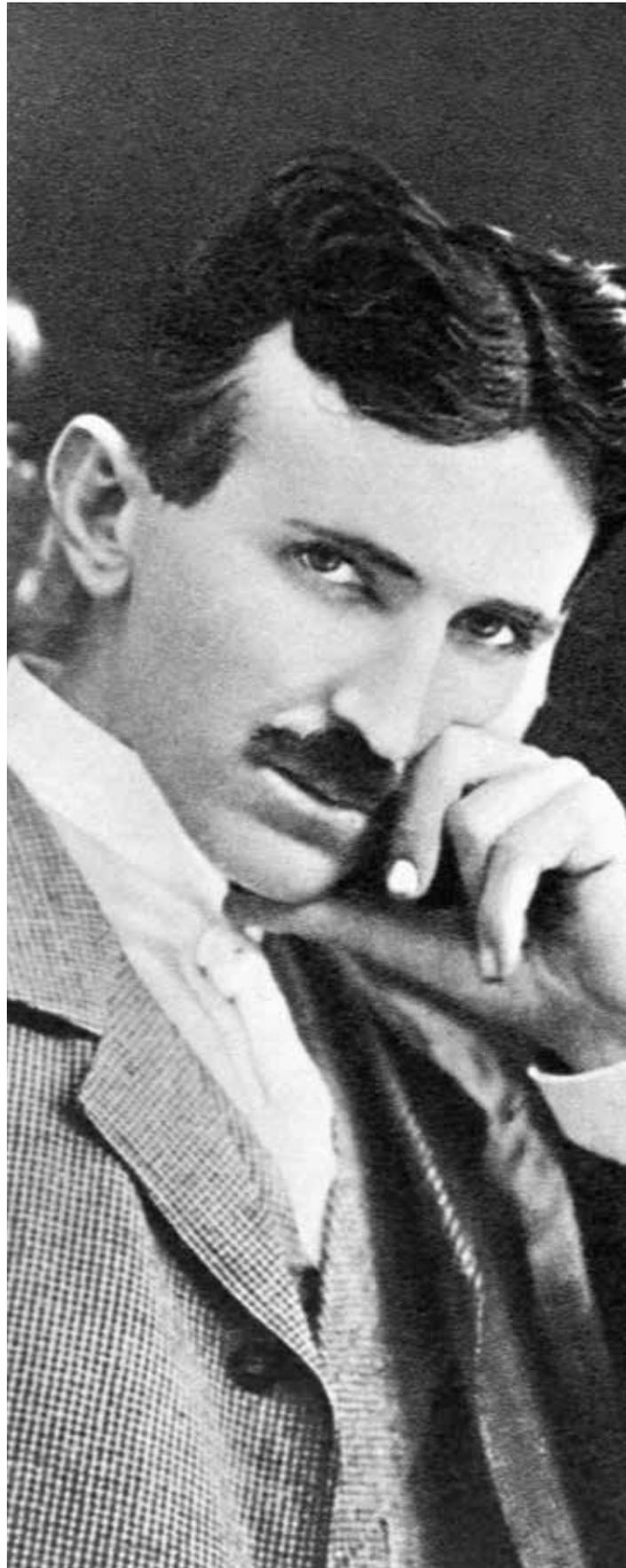
Then there is Guglielmo Marconi of course, widely regarded as the Father of Radio. The Italian inventor and Nobel laureate who sent and received the first ever radio signal in 1895 from a temporary station that he set up on the Isle of Wight.

But was it really him? Guglielmo Marconi?

What about Tesla. The very same Nikola Tesla, brilliant visionary and gifted inventor whose work still stands as the world standard for power transmission. His life was riddled with controversy and patent battles. One such battle that raged through his life and beyond was with Marconi, over the invention of radio transmission. It was he, Tesla, who had created the first basic design for Radio in 1892. He even designed a radio controlled boat that he took for a spin around the waters of Manhattan operating it remotely, standing in Madison Square Gardens. He did not file for a radio patent though, till 1897, delayed by a building fire that gutted his lab and destroyed his work. But, it wasn't too late, the patent was awarded to him. It was later in the same year that Marconi filed for his radio patent in the US and got rejected. This cycle of application and rejection continued for three years. And then, one day in 1904, the US Supreme Court simply revoked Tesla's patent.

It was only 40 years later, after the deaths of both the scientists that the Court held void Marconi's radio patents and gave them back to Tesla. It changed nothing. Marconi remains to be regarded as Father of Radio to this day.

Marconi did contribute to radio, albeit his contribution was more towards engineering and commercialization, rather than original invention. He improved upon Hertz's spark transmitter, built on it using inventions by other experimenters to phenomenally



Nikola Tesla

increase the range of transmission. He used a Tesla oscillator for his radio transmission across the English Channel. He also used Sir Jagadish Chandra Bose's Mercury Coherer, a radio wave receiver to build the first two-way radio.

The birth of radio has been a rather tempestuous journey with a long line of scientists whose contributions lie lost and forgotten in the annals of popular history, weighed down by the commercial success of another.



Hollywood actors reenacting movies on air

Russia, 1965. 70th anniversary of Popov's radio discoveries. Gibbons catalogue



Looking back in time

Not World War I, not The Great Depression, not the advent of commercial television nor the proliferation of YouTube and Netflix now have managed to obliterate this medium. In over a century of its existence, radio broadcasting has been continuously adapting and reinventing itself to cater to changing demographics and lifestyles, all the while absorbing newer technologies. Be it the community and pirate radios of then or the web radios and podcasts of today. From being the carrier of instant news and weather reports to becoming the go-to source for music of all kinds and highly niche talk shows, radio has come a long way.



Radio: An experience prime time

Curiously enough, origins of quite a few concepts, show formats and industry terms in entertainment today can be traced back to the radio. To a time when radio in the West enjoyed two glorious decades, from the 1930s to 50s. The Golden Age of Radio as you may. Spurred on by the onset of The Great Depression, people turned to affordable entertainment – all one needed was to buy a radio set, a one-time investment – to lighten the mood. Radio programs at that time were vibrant; a certain flair about them helped it gain tremendous popularity rapidly. The day

time dramas of that time which catered to the women at home, came to be soap operas as we know them. For at that time, these daily serials were typically sponsored by soap companies wanting to get the attention of this demographic. Evenings usually meant families would gather around the radio set to tune into comedy sketches, live musical performances, interviews and theatre. Paving the way for today's prime time. It surely was a golden era for radio, a time when even famous Hollywood actors recreated their major movies on air.

Looking at the future

Though listening to the radio is a uniquely personal experience, radio as a mass medium also has the power to reach, educate, inform and shape a community, and society at large. Besides, even today, radio still is the most consumed medium across the world.

In a country as huge as ours, where TV is still massively popular, it is only radio that covers 92% of its landmass, reaching to nearly 99% of the population, in over 23 local languages and 146 dialects. Reason enough then not just for the United Nations to celebrate World Radio Day every year to 'recognize the enduring power of radio

to promote diversity and to help build a more peaceful and inclusive world', but also for our Prime Minister Narendra Modi to host a live radio program to reach out to its citizens directly and even take to it as the primary means of communication in times such as now, to address the nation when the world is hit by a global pandemic of proportions never experienced before. But, is that enough?

In times of dwindling attention spans and a plethora of entertainment options, aided by dropping data rates and an increasing number of platforms available for self-expression, is that power enough. To survive? ■

Vintage Radios

