

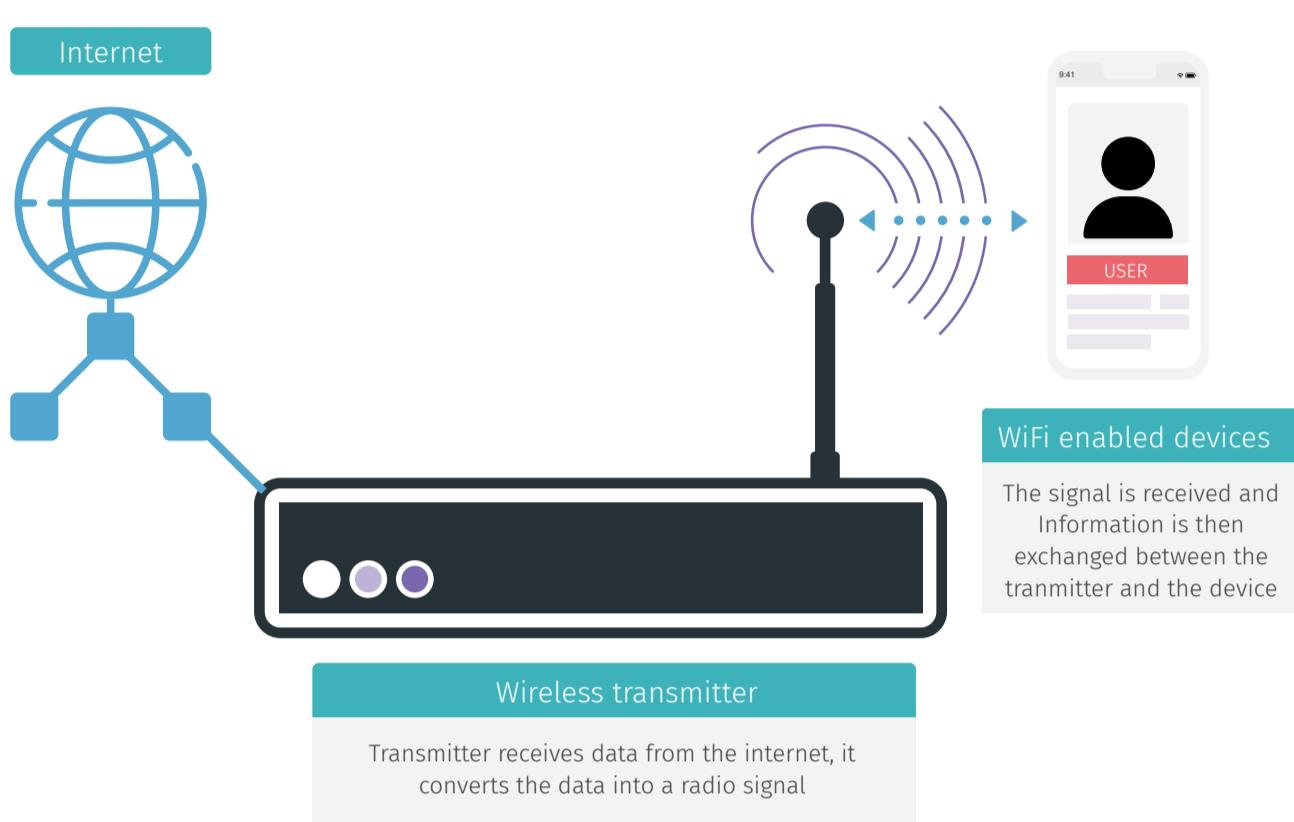
The History of WiFi



WiFi has played an integral role in keeping us connected at home and in public but how many of us know the full history behind WiFi technology? Here we've explored the history of WiFi, from where it began, what it has helped us achieve, and what future it promises us as we become increasingly interconnected.

What is WiFi, and How Does it Work?

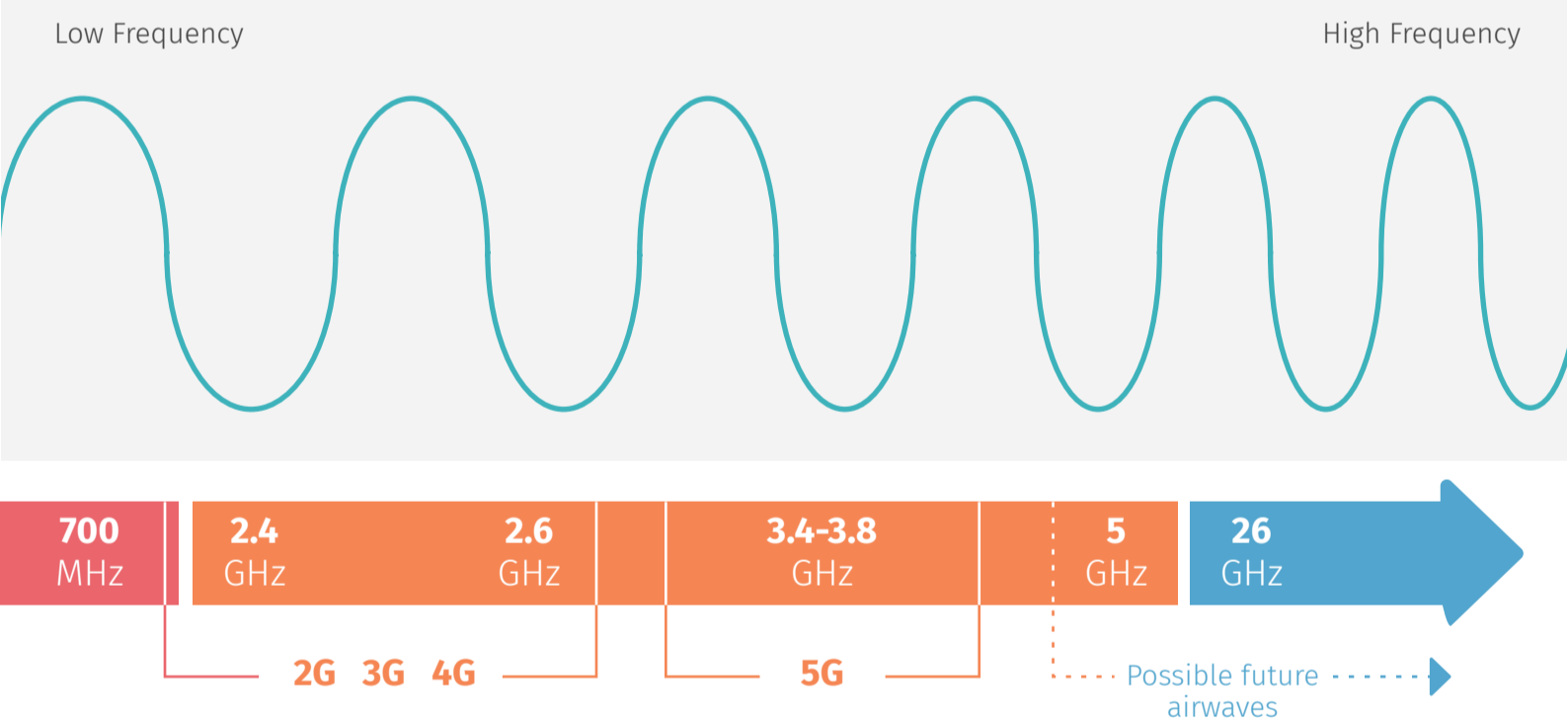
Fundamentally, WiFi is a way of getting broadband internet to a device using wireless transmitters and radio signals.



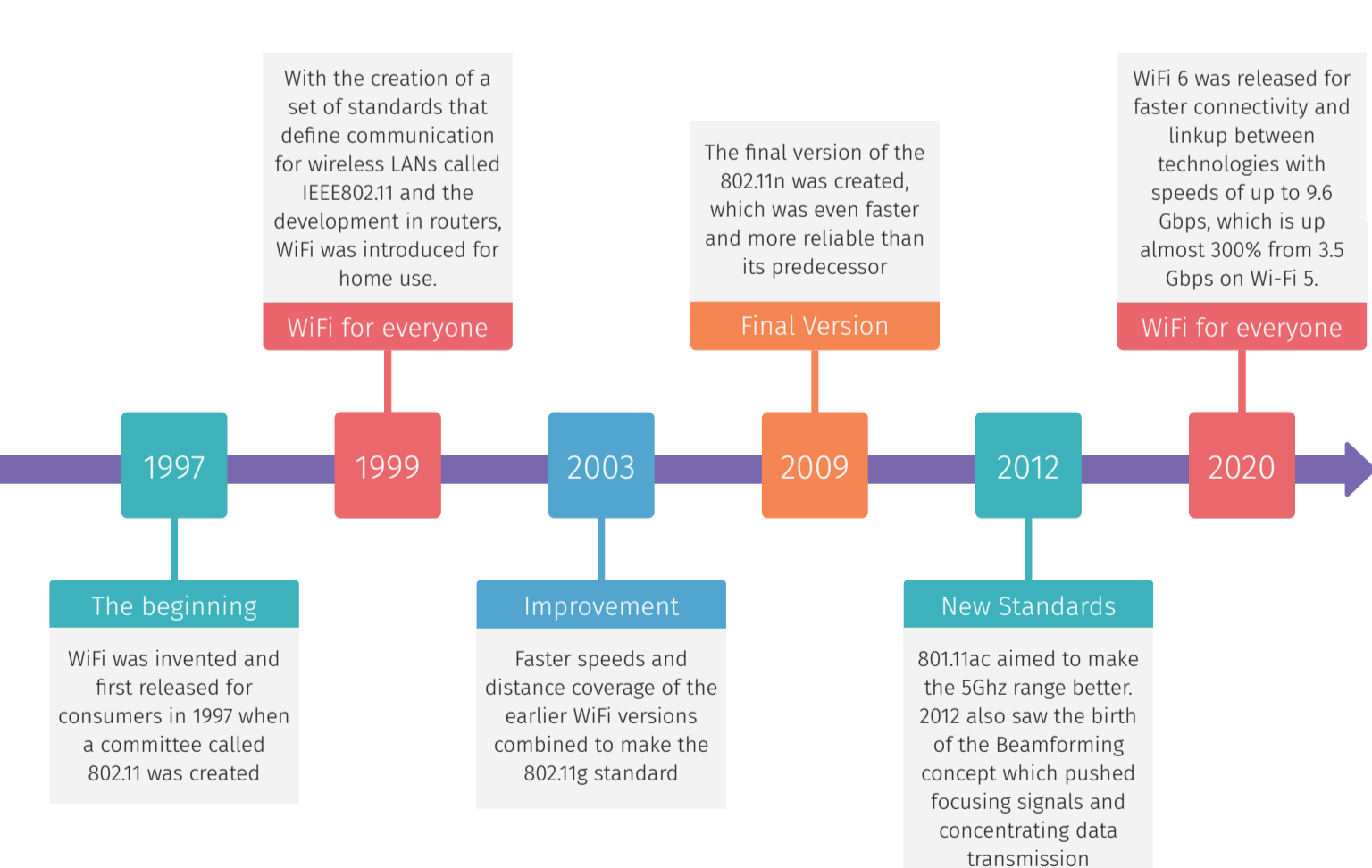
WiFi Frequencies

WiFi uses electromagnetic waves to communicate data that run at two main frequencies: 2.4GHz (802.11b) and 5GHz (802.11a). For many years, 2.4GHz was a popular choice for WiFi users because it worked with most devices and was less expensive. After 2009, a series of improvements extended the range of 2.4 GHz leading to an increasing number of devices using the same frequency. This resulted in the frequency becoming overcrowded and slow. Consequently, 5GHz became the more attractive option. Dual-band routers were created to simultaneously support connections on both 2.4 GHz and 5GHz links. By default, devices within range would connect to the faster, more efficient 5GHz frequency. A device further away could utilize 2.4GHz as a backup.

The Electromagnetic Spectrum



WiFi Development's Timeline



WiFi performance continues to improve and it's one of the most ubiquitous wireless communications technologies in use today. It's easy to install, simple to use and economical too. WiFi Access Points are now set up at home and in public hotspots, giving convenient internet access to everything from laptops to smartphones. Encryption technologies make WiFi secure, keeping out unwanted intruders from these wireless communications.

- by **Rethink Wireless**

It's clear that WiFi is no longer a one-way street – it has become an essential part of our personal and professional day-to-day, and is constantly improving our efficiency, our communication, and is persistently encourages the technology industry to push the boundaries of what's possible. All in all, the capabilities of WiFi are endless.