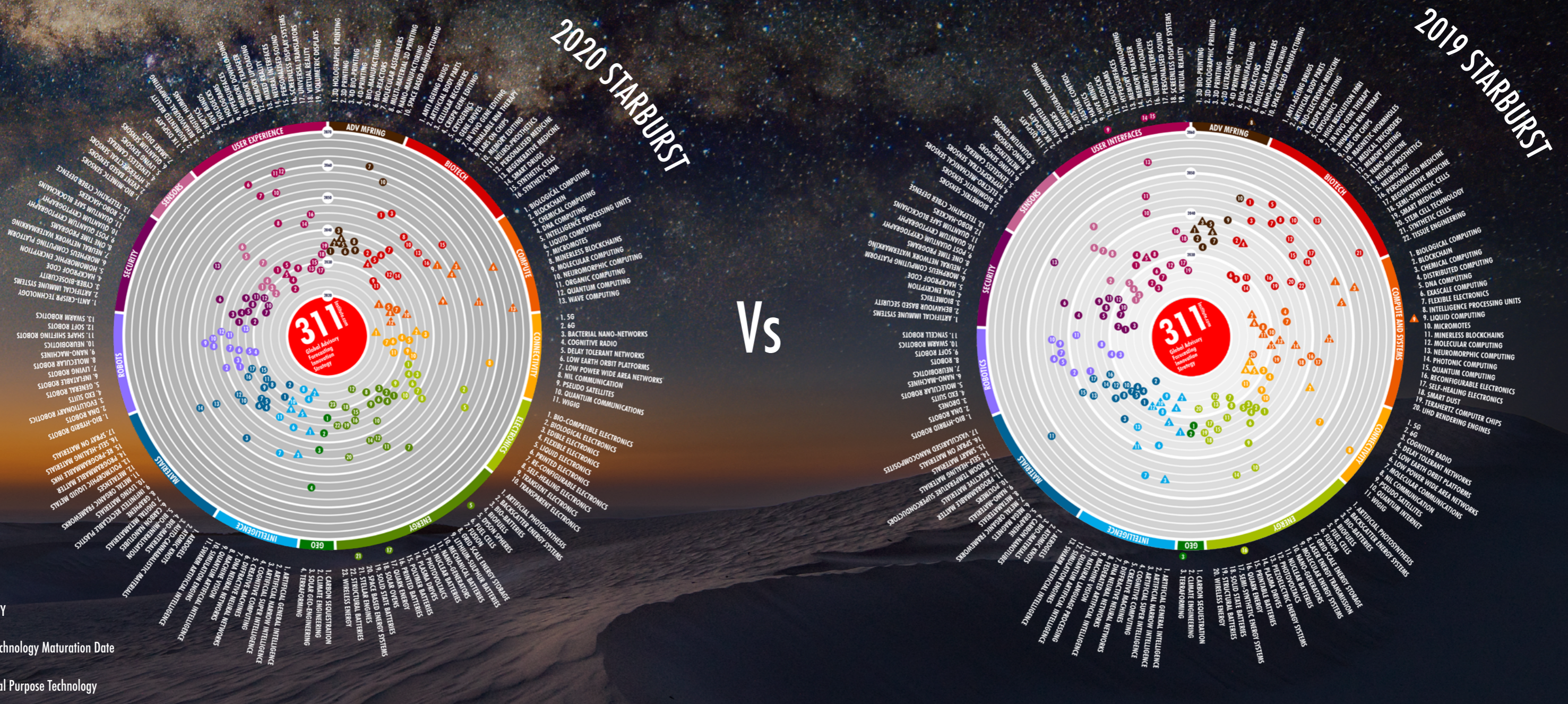




THE GRIFFIN EMERGING TECHNOLOGY STARBURST 2020 EDITION. WHAT WILL YOU #DISRUPT?



vs

WELCOME FROM @311INSTITUTE

The 311 Institute is a global Futures and Deep Futures advisory, strategy, and innovation firm, and our mission to democratise access to the future and help people realise their exponential potential.

Now in its fourth year the Griffin Emerging Technology Starburst is used by organisations all around the world to help them keep track of the latest emerging technology trends and envision the future of their companies and products.

LOOKING BACK AT 2019

In 2019 there were more notable world firsts than in 2018, especially in the field of Artificial Intelligence (AI). However, there were also noticeable breakthroughs in Advanced Manufacturing, Computing, Robotics, and Synthetic Biology which included: Achieving Quantum supremacy • An evolving AI that created tools • The first AI designed vaccine • Beef 3D printed in space • Remote robotic heart surgery • First AI made of glass • First AI signed by a record label • First invisibility cloak • First light sabres • First replicating synthetic cells • First synthetic genome

- First Living material • First living robot • First in vivo autonomous robot journey • First programmable DNA computer • First AI written book • First fully autonomous EV energy grid • First fully autonomous vertical farm
- AI beats superstar human gamers • First 8 base pair DNA organism • First AI strategy development platform
- First aerosol based genetic engineering solution • First AI counsellor • First 5G robot remote surgery • First lab grown fillet steak • First intricate tractor beam • First 8 base pair DNA double helix ... and MANY more.

INTRODUCING THE 2020 STARBURST

In this year's Starburst, which displays 167 of the world's most promising emerging technologies, each with an addressable market value of at least \$500 Billion spread across 13 categories, including for the first time Electronics, I expanded the timeline from 2060 to 2070, promoted 44 new emerging technologies, and demoted 45.

In 2020 I expect a slight slow down in the number of AI breakthroughs as the resources needed to create new models rises exponentially. As a result breakthroughs will likely be more evenly distributed across the different technology categories.

MORE RESOURCES ...

Click or scan the QR code to download our Starbursts FREE companion EXPONENTIAL TECHNOLOGY CODEX to explore these technologies in more detail, and get access to thousands of articles, keynotes, podcasts, reports, and videos.

EXPLORE MORE. Click or scan me to learn more about the future.

