Marc Benayoun, a graduate of ESSEC Business School, started his career in the Paribas Group in 1989, before joining The Boston Consulting Group in 1993. He became Associate Director at the Paris office in 2001, then at the Moscow office in 2008. During this period, he took on various responsibilities, including the development of the company's natural gas expertise and activities. He also spearheaded the expansion of the Paris office into government consulting (with clients including the Ministry of Finance, the Ministry of Energy and Transportation, and the Ministry of Health).

In 2009, he joined the EDF Group as Tariffs & Prices Director, at the Commerce Division. He was notably in charge of discussions related to changes in the French regulated electricity tariffs. In 2012, he became Director, Business Customers Market. In this role, he managed the project to end regulated electricity tariffs for companies and local communities, which resulted in EDF regaining its leadership position in a competitive environment.

In 2016, Marc Benayoun was appointed Member of the Executive Committee of the EDF Group, Gas and Italy. As such, he served as Chief Executive Officer of Edison, the third-largest Italian energy company. He also oversaw gas procurement activities for the EDF Group, and managed its portfolio of long-term contracts for the transport of natural gas by pipeline and by sea, as well as the assets needed to transport the gas to the delivery points. In addition to his corporate responsibilities, Marc Benayoun also speaks regularly at colleges and universities (Mines ParisTech, Paris-Dauphine University, Bocconi University in Milan), where he discusses the structure of the electricity and gas industries, the regulations that govern them, as well as the topic of leadership in the energy transition.

In 2018, he received the Economist of the Year award from the Italian Association of Energy Economists.

In July 2019, Marc Benayoun was appointed Group Senior Executive Vice-President, Customers & Energy Services. In this capacity, he is heading the Commerce Division and supervises energy services related entities, including Dalkia. Marc Benayoun also serves as a member of the EDF Trading Board of Directors, Chairman of the Edison Board of Directors, and supervises the EDF Group's gas procurement platform in Italy.