

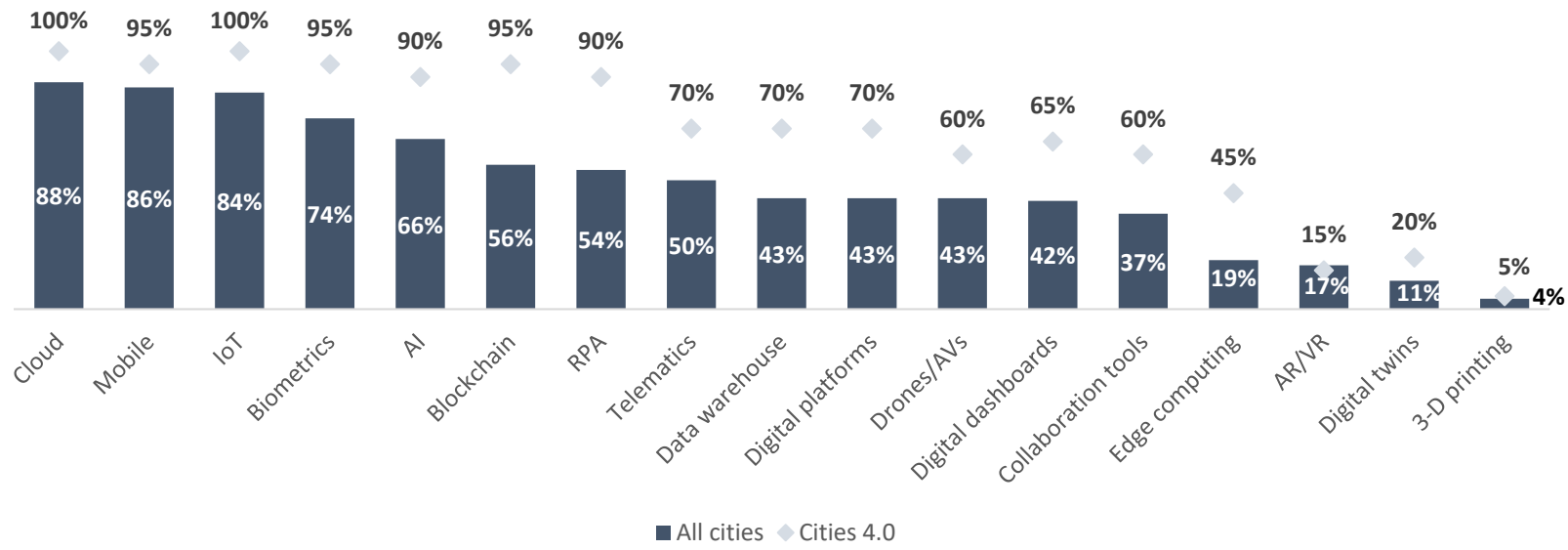
3. Technology: Placing the right bets

Cities are adopting a wide array of smart technologies, especially cloud, mobile, IoT, biometrics, and AI.

Cities 4.0 are moving even faster to leverage advanced technologies: 100% have made hefty investments in cloud and IoT, and slightly fewer are spending significantly on mobile, biometrics, blockchain, AI, and RPA.

Over the next three years, cities plan to increase investments significantly in digital twins, 3-D printing (off an extremely small base), data warehouses, augmented and virtual reality, blockchain, digital dashboards, and drones. The share of cities making large investments will jump the most for digital twins, from 11% today to 31% in three years—a rise of almost 300%. For Cities 4.0, the increase in digital twins will be even greater, from 20% today to 70% in three years.

% of cities making large investments today



% increase in cities making large investments over next 3 years

282% Digital twins	200% 3-D printing
149% Data warehouse/lakes	147% AR/VR
127% Blockchain	126% Digital dashboards
126% Drones, AVs	124% Telematics/geospatial
121% AI	119% Online collaborative tools

“Smart technology, data, and analytics will need to be translated into new sustainable economic and environmental policies. AI and analytics-based solutions providing real-time and predictive information will be key alongside having better data and multiple data sources.”

William Baver, Vice President, Smart Platform, NTT

Q16: In which of the following digital technologies and solutions has your city made large investments and in which will you make large investments over the next three years?