Ever take a moment to think about the digital devices that streamline our daily tasks—the Fitbit counting our steps or Alexa turning off the lights before bed? These objects and devices compose a network that communicates with other internet-enabled devices and systems, known as the “internet of things” (IoT).
The efficiencies and benefits of IoT are astronomical. If you are exploring ways to incorporate IoT into your business practices, consider the following tips

1 DEFINE YOUR GOAL

IoT provides endless opportunities for the assessment of consumer data, but begin with a goal that aligns with the opportunities or threats within your competitive analysis. If your firm struggles with customer service, consider metrics that can provide insights. IoT can be overwhelming without a roadmap, so knowing your outcomes helps you refine your efforts.

2 SELECT YOUR SENSORS

IoT devices are relatively cheap, so it may be useful to buy a few different brands to see which devices work best for your organization. Well-known IoT devices include Relayr’s Wunderbar and Intel’s collection of IoT sensors.

3 FACTOR IN PERSONNEL

Entering the IoT arena will likely pay off as an investment, but you must have the technical expertise on your team to manage the deployment and synthesis of data.

4 SECURITY

IoT is still a relatively new business practice and because of its connectivity, security must be considered for the protection of customer data. One great way to protect your information is to allow users to authenticate an IoT device using simple static passwords, pins, or a more robust authentication, such as two-factor authentication (e.g. a required password, but also a piece of information only a user has or knows, like the make and model of a first car).

5 MANAGE INFRASTRUCTURE AND STORAGE

Before data starts pouring in from the sensors, you need processes in place to parse that information. Depending on how much data your sensors generate, your company may have to invest in additional servers. Alternatively, storing IoT data in the cloud can be beneficial. Infrastructure as a Service (IaaS) has become popular because users are charged only for the space they use in the cloud and are able to access their data at any time. Machine learning services can also be applied to data in the cloud to analyze and find patterns.

The national network of MBDA Business Centers works with minority-owned firms to speed their inclusion in this ecosystem. Visit www.mbda.gov/grow for more information.