



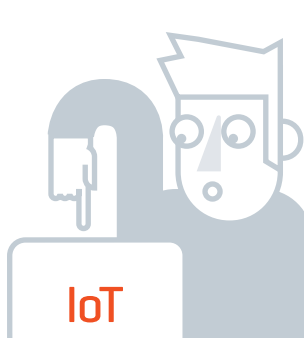
Hardly anything is hotter these days than the Internet of Things (IoT). Every business wants to coin the term. But what do developers, the nurturers of IoT projects now and in the future, think of it? We talked to 675 developers to find out what they are experiencing in the IoT space; are they commercializing apps and seeing future opportunities? Are they well equipped with the right technologies to deal with IoT demand? Which technologies are they using now? Which do they expect to use in the future? Here is what we found out.

### IoT Adoption

Most developers see mass adoption of IoT apps occurring within the next five years



**45%**  
developers are currently building IoT apps



**77%**  
are excited about the IoT

### Commercial Potential of IoT Apps

Developers should focus more on services rather than devices to open up significant revenue potential

Today: **65%** of IoT applications generate revenue



By 2018: **80%** expect them to make money

### IoT App Development - from Smart Homes to Smart Cities

Developers see strong IoT app development across industries with Smart Home, Wearables and Sports/Fitness leading the way



The future belongs to the Healthcare, Smart City and Automotive industries

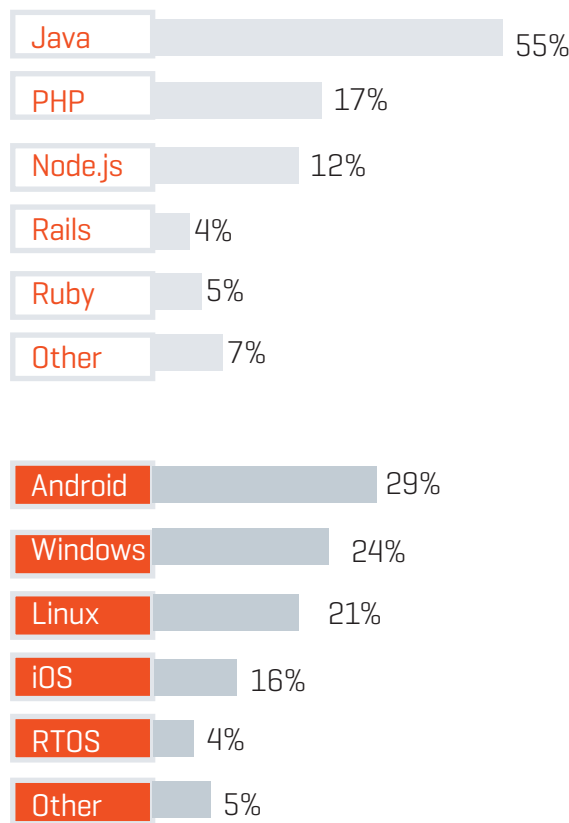
### Technology and Language Preferences

Developers are not strongly united around a particular platform or language for developing IoT apps

**55%** consider Java the best language to collect server-side data

**29%** think Android is the best OS for building and coordinating IoT apps

**75%** use Rapid Application Development (RAD) tools at least occasionally



### Challenges for the Developer Community

Lack of technology, skills and tools are among the greatest challenges



only **50%**

have the skills, resources and tools to deliver on IoT expectations



**30%**

experience data overload when managing data sets for contextualized IoT apps



Interoperability, integration, security and privacy are the top four concerns of developers today



Commercial vendors **31%** and the open source community **24%** are the organizations with the greatest power to help overcome these obstacles

### Predictions for IoT App Development in the Next Five to Ten Years



**58%** expect the IoT to expand beyond smartphones and tablets within two years

**60%** see future IoT apps running in the cloud and interacting with multiple devices

**81%** believe developers should provide leadership in defining the IoT and its future

The IoT is still in its infancy. New offerings should be highly flexible and forward-looking to adapt to new technologies and future needs. Therefore, a new generation of data services will be required to meet data volume, velocity, complexity and overall management challenges, providing real-time analytics, close-loop control and local systems collaboration. Data management and information management models will be needed for this market opportunity to flourish.

Curious to learn more? Download the new [Harbor Research report](#) commissioned by Progress