

# **Suggestion for Creating a NIST Big Data PWG Users Guide**

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One method for creating a Users Guide is to list the Users of the NIST Documents and their Big Data questions. The answers to these questions could include pointers to relevant sections and key takeaways in the documents. A list of users and their questions are below. The list is meant to be a rough draft to stimulate discussion.

### **Senior Executives**

- What applications are appropriate for Big Data technology?
- What are the benefits?
- What are the risks?

### **System Architects**

- What are the alternatives for Big Data architectures?
- How can the NIST Reference Architecture be used architectural planning?
- How should Big Data architectural alternatives be evaluated?

### **Project Managers**

- Which Big Data technologies should be used on my project?
- Are there standards and/or best practices for Big Data development and deployment?
- What skill sets are needed on my project staff based on technology choices?

### **Data Scientists**

- Where can I find information about the latest analytics and machine learning technologies and tools?
- What are the future directions for Big Data applications, data stores, and standards?
- What will be the future role for Data Scientists?

### **Database Managers**

- What are the alternatives for Big Data data stores?
- What are the benefits and risks of each alternative?
- What are possible future standards for portability and interoperability?

### **Security and Privacy Analysts**

- How well do Big Data data stores implement security and privacy?
- Are there emerging best practices and/or standards?
- Should there be some type of compliance evaluation for future Big Data data stores and applications?

### **Developers**

- Where can I find information about the latest Big Data software development technologies and tools?
- How are Big Data technologies prototyped and tested?
- What are the changes to the software development process for Big Data applications?

### **Vertical Application End-Users**

- Are there examples of Big Data application in my vertical application area?
- Where can I find more information about potential future applications in my vertical application area?
- Is additional end-user training required for the use of Big Data applications in my vertical application area?

### **IT Staff**

- How can make IT use of the NIST Reference Architecture to understand roles and responsibilities in developing, deploying and running applications?
- What changes will be needed to network, data store, software, and hardware platforms for Big Data applications?
- What tools and best practices are available for monitoring, managing, and maintaining Big Data applications?

### **Standards Groups**

- Are there emerging standards for Big Data applications?
- How can the NIST documents be used to help create future standards?
- What are the highest priorities for developing future standards?

### **Chief Data Officers**

- How do new Big Data technology and applications fit into existing technology and application architectures?
- What changes are needed in organizational structure for development, deployment and operation of Big Data applications?
- What are the management, security, privacy, compliance, governance, and standards best practices for Big Data?