Big data

Part 2: Guidance on data-intensive projects
Foreword

Publishing information
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Relationship with other publications
BS 10102, Big data, comprises the following parts:
- Part 1: Guidance on data-driven organizations; and
- Part 2: Guidance on data-intensive projects.
These documents explain how an organization can put in place the necessary governance and methodologies to maximize the benefits of big data and run successful data-intensive projects.

Information about this document
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Use of this document
As a guide, this British Standard takes the form of guidance and recommendations. It should not be quoted as if it were a specification or a code of practice and claims of compliance cannot be made to it.

This document is intended to be read in conjunction with BS 10102-1.

Presentational conventions
The guidance in this standard is presented in roman (i.e. upright) type. Any recommendations are expressed in sentences in which the principal auxiliary verb is “should”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. “organization” rather than “organisation”).

Contractual and legal considerations
This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.
In particular, attention is drawn to the following specific regulations:

- The General Data Protection Regulation (GDPR) (EU) 2016/679 [1];
- The Data Protection Act 2018 [2];
- Directive 2002/58/EC on privacy and electronic communications [3];
- The Charter of Fundamental Rights of the European Union (2000) [5];
- Directive (EU) 2016/1148 concerning measures for a high common level of security of network and information systems across the Union [6];
- Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts [7]; and
- The Consumer Rights Act 2015 [8].
Introduction

This British Standard promotes good practice for all organizations processing and exploiting data. Depending on the context or setting of the organization, this includes data which can be viewed as “big data”. Thus, while the text throughout refers to “data” generically, this includes “big data”.

The term “big data” and the understanding of this continue to evolve. For the purposes of this document big data refers to single, disparate or integrated data sets potentially requiring scalable systems and technologies for efficient storage, manipulation, management and analysis for transformation into value. This standard recognizes that what is “big” for one organization is not necessarily so for another, and that technology and context are likely to change frequently, so any precise definition is likely to require frequent review.

Data are essential for business decision-making and provide ongoing benefit to an organization. This includes raw data, spreadsheets, photographs, documents, and drawings, whether stored electronically or on physical media, such as paper records.

Project management started to be recognized as a specific discipline in the mid-20th Century. Early projects would have had few or no data aspects, but as society has become ever more reliant on data, projects have in turn had greater proportions of their activities relating to data. This document provides guidance for organizations which are undertaking data-intensive projects.

Projects can deliver a large variety of outputs, ranging from new products and/or services, replacement of software systems, development of new insights and capabilities and restructuring of organizations. Construction and engineering projects whose main output might be a physical asset also rely on effective exploitation of data.

Data-intensive projects are those that consume, create, analyse and/or process large volumes of data which are critical for the successful delivery of the project. What is data-intensive for one organization might not be so for another, and each organization needs to interpret the guidance in its own individual circumstances.

With business and industries producing vast quantities of data there is an increased need for new approaches to managing, storing, compressing, analysing and distributing the information. Through the cross-disciplinary nature of data-intensive projects users can engage in tasks ranging from computational challenges to implementation into real-life applications, thereby delivering data-driven solutions.

BS 10102 has been developed in two parts to provide guidance for a data-driven organization and how data-intensive projects are initiated by the organization, with project outputs informing and influencing the organization. These two documents are intended to be used together. Figure 1 illustrates the relationship between these two parts.
1 Scope

This part of BS 10102 provides guidance on good practice for implementing data-intensive projects to realize value, including:

a) defining project objectives and project type;
b) data project management methodology;
c) project roles and responsibilities;
d) defining the approach to governance and compliance (see BS 10102-1:2020, Clause 6);
e) operating governance and compliance within a framework;
f) working with partners, suppliers, technology providers, consumers and other third parties; and
g) project closure – review against project objectives, communication and lessons learned.

It is applicable to public, private, non-profit and not-for-profit organizations of all sizes.

It does not give guidance on the funding arrangements for projects.

This British Standard does not repeat general project management approaches defined in other standards.