

---

---

## Information technology — Big data — Overview and vocabulary

*Technologies de l'information — Mégadonnées — Vue d'ensemble et  
vocabulaire*



## **COPYRIGHT PROTECTED DOCUMENT**

© ISO/IEC 2019

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Fax: +41 22 749 09 47  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland

# Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms, definitions and abbreviated terms</b> .....	<b>1</b>
3.1 Terms and definitions .....	1
3.2 Abbreviated terms .....	6
<b>4 Key characteristics of big data</b> .....	<b>6</b>
4.1 General .....	6
4.2 Key data characteristics .....	6
4.2.1 Data volume .....	6
4.2.2 Data velocity .....	6
4.2.3 Data variety .....	6
4.2.4 Data variability .....	6
4.3 Key data processing characteristics .....	7
4.3.1 Data science .....	7
4.3.2 Data volatility .....	7
4.3.3 Data veracity .....	7
4.3.4 Benefit .....	7
4.3.5 Data visualization .....	7
4.3.6 Structured and unstructured data .....	7
4.3.7 Scaling .....	7
4.3.8 Distributed file system .....	8
4.3.9 Distributed data processing .....	8
4.3.10 Non-relational databases .....	8
<b>Annex A (informative) Cross-cutting concepts of big data</b> .....	<b>9</b>
<b>Bibliography</b> .....	<b>12</b>