AMENDMENTS
1 - 249

Draft motion for a resolution
Barbara Kappel
(PE554.772v01-00)

Towards a thriving data-driven economy
Amendment 1
Barbara Kappel

Draft motion for a resolution
Citation 4 a (new)

Draft motion for a resolution
- having regard to the European Parliament resolution of 10 December 2013 on "Unleashing the potential of cloud computing in Europe" (2013/2063(INI))

Or. en

Amendment 2
Barbara Kappel

Draft motion for a resolution
Citation 4 b (new)

Draft motion for a resolution
- having regard to the Communication of the Commission "A Digital Single Market Strategy for Europe"

Or. en

Amendment 3
Michel Reimond on behalf of the Verts/ALE Group

Draft motion for a resolution
Subheading 1

Draft motion for a resolution
- Placing Big Data within the Digital Union strategy

The role of data-driven economy within the Digital Union strategy

AM\1061290EN.doc 3/115 PE557.190v01-00
Draft motion for a resolution
Subheading 1 a (new)

Amendment

Welcomes the recognition in the Digital Single Market strategy of the fact that Big data, cloud services and the Internet of Things (IoT) are central to the EU's competitiveness and the envisaged proposal for a free flow of data inside the EU. Believes that for Big Data services to develop there will be a need for a flexible approach towards the secure use and re-use of data.

Amendment 5
Barbara Kappel

Draft motion for a resolution
Subheading 1 b (new)

Amendment

Follows the Commission's definition of Big Data as pointed out in the Communication of the Commission "Towards a thriving data-driven economy" (COM(2014)0442);
Draft motion for a resolution
Subheading 1 c (new)

Expects that the benefits of Big Data at national and European level will have an impact on society and on all types of enterprises on all levels of the value chain.

Or. en

Amendment 7
Cornelia Ernst

Draft motion for a resolution
Paragraph 1

1. Points out that decisions based on knowledge generated by Big Data bring a 5-6% increase in productivity and competitiveness and that the benefits from Big Data will bring 1.9% additional GDP growth per year; sees the potential of Big Data at the core of Europe's economic recovery;

Or. en

Amendment 8
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 1

1. Points out that decisions based on knowledge generated by Big Data bring a 5-6% increase in productivity and can lead to economic growth, reduce
competitiveness and that the benefits from Big Data will bring 1.9% additional GDP growth per year; sees the potential of Big Data at the core of Europe's economic recovery;

unemployment and improve the democratic decisions;

Amendment 9
David Borrelli, Dario Tamburrano

Draft motion for a resolution
Paragraph 1

Draft motion for a resolution
1. Points out that decisions based on knowledge generated by Big Data bring a 5-6% increase in productivity and competitiveness and that the benefits from Big Data will bring 1.9% additional GDP growth per year; sees the potential of Big Data at the core of Europe's economic recovery;

Amendment
1. Points out that decisions based on knowledge generated by means of the integrated use of data will play a major role in the prosperity and the social and economic welfare of Europe;

Or. it

Amendment 10
Barbara Kappel

Draft motion for a resolution
Paragraph 1

Draft motion for a resolution
1. Points out that decisions based on knowledge generated by Big Data bring a 5-6% increase in productivity and competitiveness and that the benefits from Big Data will bring 1.9% additional GDP growth per year; sees the potential of Big Data at the core of Europe's economic recovery;

Amendment
1. Points out that decisions based on knowledge generated by Big Data bring a 5-6% increase in productivity and competitiveness and that the benefits from Big Data will bring 1.9% additional GDP growth per year which will result in 3.75 million new jobs in the EU by 2017, according to the European Big Data Value Partnership; stresses that the Big...
Data market growth rate until 2017 of 27% will be six times faster than the overall ICT market and will reach an overall total of €50 billion according to the IDC’s Worldwide Big Data Technology and Services 2013-2017 forecast; sees the potential of Big Data at the core of Europe's economic recovery, yet only if there is the right environment and adequate means to trigger the digital transformation;

Or. en

Amendment 11
Renato Soru, Patrizia Toia

Draft motion for a resolution
Paragraph 1

Draft motion for a resolution

1. Points out that decisions based on knowledge generated by Big Data bring a 5-6% increase in productivity and competitiveness and that the benefits from Big Data will bring 1.9% additional GDP growth per year; sees the potential of Big Data at the core of Europe's economic recovery;

Amendment

1. Points out that, according to some projections, decisions based on knowledge generated by Big Data may bring a 5-6% increase in productivity and competitiveness and that the benefits from Big Data may bring 1.9% additional GDP growth per year; sees Big Data as an opportunity to regain European competitiveness in advanced sectors;

Or. en

Amendment 12
Kaja Kallas, Fredrick Federley, Philippe De Backer, Pavel Telička, Juan Carlos Girauta Vidal, Marietje Schaake

Draft motion for a resolution
Paragraph 1

Draft motion for a resolution

1. Points out that decisions based on

Amendment

1. Points out that decisions based on
knowledge generated by Big Data bring a 5-6% increase in productivity and competitiveness and that the benefits from Big Data will bring 1.9% additional GDP growth per year; sees the potential of Big Data at the core of Europe's economic recovery;

knowledge generated by Big Data bring a 5-6% increase in productivity and competitiveness and that the benefits from Big Data will bring 1.9% additional GDP growth by 2020; sees the potential of Big Data at the core of the Digital Single Market strategy and of Europe's economic recovery;

Amendment 13
Krišjānis Kariņš

Draft motion for a resolution
Paragraph 1

1. Points out that decisions based on knowledge generated by Big Data bring a 5-6% increase in productivity and competitiveness and that the benefits from Big Data will bring 1.9% additional GDP growth per year; sees the potential of Big Data at the core of Europe's economic recovery;

1. Points out that decisions based on knowledge generated by Big Data bring a 5-6% increase in productivity and competitiveness and that the benefits from Big Data sector will bring 1.9% additional GDP growth per year; stresses the potential of Big Data serving as an accelerator for Europe's economic recovery, growth, investment and innovation across all sectors;

Amendment 14
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 1 a (new)

1 a. Stresses that a data-driven economy can and should to a huge extent be based on anonymous or anonymized data;
Amendment 15
Barbara Kappel

Draft motion for a resolution
Paragraph 1 (new)

1 a. Points out that the volume of data is growing at unprecedented pace, so that by 2020 according to the European Big Data Value Partnership there will be more than 16 Trillion gigabyte of Data which is the equivalent of an annual growth rate of 236% in data generation.

Amendment 16
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 2

2. Stresses that Big Data creates employment as the need for specialist Big Data staff will increase by 243% in the next five years to about 69000 people;

Amendment 17
Cornelia Ernst
Draft motion for a resolution
Paragraph 2

Draft motion for a resolution

2. Stresses that Big Data creates employment as the need for specialist Big Data staff will increase by 243% in the next five years to about 69000 people;

Amendment

Draft motion for a resolution

2. Stresses that Big Data creates employment as the need for specialist Big Data staff will increase by 243% in the next five years to about 69000 people;

2. Stresses that the data-driven economy will change the labour market requirements, especially by focusing on some professionals with the "data skills" and providing the professional data skills into and for small business and start-ups. This is the purpose - to have an effective and efficient cross-fertilisation of talent and skills bridging diverse areas. Big Data will increase employment by 243% in the next five years to about 69000 people.

Amendment 18
Michał Boni, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek, Adina Ioana Vălean, Lambert van Nistelrooij, Krišjānis Kariņš

Draft motion for a resolution
Paragraph 2

Draft motion for a resolution

2. Stresses that Big Data creates employment as the need for specialist Big Data staff will increase by 243% in the next five years to about 69000 people;

Amendment

Draft motion for a resolution

2. Stresses that the data-driven economy will change the labour market requirements, especially by focusing on some professionals with the "data skills" and providing the professional data skills into and for small business and start-ups. This is the purpose - to have an effective and efficient cross-fertilisation of talent and skills bridging diverse areas. Big Data will increase employment by 243% in the next five years to about 69000 people.

Amendment 19
Kaja Kallas, Fredrick Federley, Philippe De Backer, Pavel Telička, Juan Carlos Girauta Vidal, Marietje Schaake

Draft motion for a resolution
Paragraph 2
Draft motion for a resolution

2. Stresses that Big Data creates employment as the need for specialist Big Data staff will increase by 243% in the next five years to about 69000 people;

Amendment

2. Stresses that Big Data creates employment as the Big Data sector is growing by 40% per year and the demand for Big data specialists is expected to create a significant number of new jobs in Europe in the coming years;

Or. en

Amendment 20
Renato Soru, Martina Werner, Patrizia Toia

Draft motion for a resolution
Paragraph 2

Draft motion for a resolution

2. Stresses that Big Data creates employment as the need for specialist Big Data staff will increase by 243% in the next five years to about 69000 people;

Amendment

2. Stresses that Big Data requires advanced skills and creates employment as the need for workers in the sector of Big Data is projected to increase in the coming years;

Or. en

Amendment 21
David Borrelli, Dario Tamburrano

Draft motion for a resolution
Paragraph 3

Draft motion for a resolution

3. Recognizes the social and economic benefits associated with Big Data, especially in relation to public safety, open government, democracy and administration, scientific breakthroughs, manufacturing, banking, insurance, telecom, high tech, retail, geospatial, services, automotive, media and

Amendment

3. Recognises the social and economic benefits associated with the integrated use of data, potentially in all sectors of the European economy, and underlines the importance of complete transparency with regard to the ways in which data are gathered, the purposes for which this is done, the way in which they are managed,
entertainment, energy and utilities; the uses to which they are put, and possession of data;

Amendment 22
Barbara Kappel

Draft motion for a resolution
Paragraph 3

Draft motion for a resolution

3. Recognizes the social and economic benefits associated with Big Data, especially in relation to public safety, open government, democracy and administration, scientific breakthroughs, manufacturing, banking, insurance, telecom, high tech, retail, geospatial services, automotive, media and entertainment, energy and utilities;

Amendment

3. Recognizes the social and economic benefits associated with Big Data, especially in relation to public safety, open government, democracy and administration, scientific breakthroughs, manufacturing, banking, insurance, telecom, high tech, retail, geospatial services, weather and climate change research, agriculture, industrialization, pharmaceuticals, automotive industry, public policy, social services, traffic management and transport, application and services, education, consumer goods media and entertainment, energy and utilities, cyber-security, tax fraud prevention and detection, aviation, and healthcare; recognizes that this list is non-exhaustive.

Or. en

Amendment 23
Krišjānis Kariņš

Draft motion for a resolution
Paragraph 3

Draft motion for a resolution

3. Recognizes the social and economic benefits associated with Big Data,

Amendment

3. Recognizes the social and economic benefits associated with fully exploited Big

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especially in relation to public safety, open government, democracy and administration, scientific breakthroughs, manufacturing, banking, insurance, telecom, high tech, retail, geospatial, services, automotive, media and entertainment, energy and utilities;

Data sector, including areas, such as, science, research and innovation, energy and utilities, public safety, open government, democracy and administration, manufacturing, banking, insurance, telecom, high tech, retail, geospatial, services, automotive, media and entertainment, among others;

Amendment 24
Michal Boni, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek, Adina-Ioana Vălean, Lambert van Nistelrooij

Draft motion for a resolution
Paragraph 3

Draft motion for a resolution Amendment

3. Recognizes the social and economic benefits associated with Big Data, especially in relation to public safety, open government, democracy and administration, scientific breakthroughs, manufacturing, banking, insurance, telecom, high tech, retail, geospatial, services, automotive, media and entertainment, energy and utilities;

3. Recognizes the social and economic benefits associated with Big Data, especially in relation to public safety, open government, democracy and administration, scientific breakthroughs, transportation, natural disaster management, smart cities, manufacturing, banking, insurance, official statistics sector, telecom, retail, geospatial field, cyber security, media and entertainment, energy efficiency and utilities, among others;

Amendment 25
Kaja Kallas, Fredrick Federley, Philippe De Backer, Pavel Telička, Juan Carlos Girauta Vidal, Marietje Schaake

Draft motion for a resolution
Paragraph 3
3. Recognizes the social and economic benefits associated with Big Data, especially in relation to public safety, open government, democracy and administration, scientific breakthroughs, manufacturing, banking, insurance, telecom, high tech, retail, geospatial, services, automotive, media and entertainment, energy and utilities;

3. Recognizes the social and economic benefits associated with Big Data across all sectors, especially in relation to public safety, health, open government, democracy, simplification and modernisation of public administrations, research and scientific breakthroughs, manufacturing, banking, insurance, telecom, high tech, retail, geospatial, services, automotive, media and entertainment, energy, transport and utilities; Underlines that the digitisation of these sectors is an important driver of development for big data, and therefore requires an horizontal approach at European and national level for the data economy to grow;

Or. en

Amendment 26
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 3

3. Recognizes the social and economic benefits associated with Big Data, especially in relation to public safety, open government, democracy and administration, scientific breakthroughs, manufacturing, banking, insurance, telecom, high tech, retail, geospatial, services, automotive, media and entertainment, energy and utilities;

3. Recognizes the social and economic benefits associated with data processing, especially in relation to public safety, open government, democracy and administration, scientific breakthroughs, manufacturing, banking, insurance, telecom, high tech, retail, geospatial, services, automotive, media and entertainment, energy and utilities;

Or. en
Draft motion for a resolution
Paragraph 3

3. Recognizes the social and economic benefits associated with Big Data, especially in relation to public safety, open government, democracy and administration, scientific breakthroughs, manufacturing, banking, insurance, telecom, high tech, retail, geospatial, services, automotive, media and entertainment, energy and utilities;

Amendment

3. Recognizes the social and economic benefits associated with Big Data, especially in relation to public safety, open government, democracy and administration, scientific breakthroughs, health, manufacturing, banking, insurance, telecom, high tech, retail, geospatial, services, automotive, media and entertainment, energy and utilities;

Or. it

Amendment

3. Recognizes the social and economic benefits associated with Big Data, especially in relation to public safety, open government, democracy and administration, scientific breakthroughs, manufacturing, banking, insurance, telecom, high tech, retail, geospatial, services, automotive, media and entertainment, energy and utilities;

Amendment

3. Recognizes the social and economic benefits associated with Big Data, especially in relation to public safety, open government, democracy and administration, scientific breakthroughs, manufacturing, banking, insurance, telecom, high tech, retail, geospatial, services, automotive, media and entertainment, energy and utilities, e-commerce, public health;

Or. en
Draft motion for a resolution
Paragraph 3

3. Recognizes the social and economic benefits associated with Big Data, especially in relation to public safety, open government, democracy and administration, scientific breakthroughs, manufacturing, banking, insurance, telecom, high tech, retail, geospatial, services, automotive, media and entertainment, energy and utilities;

Amendment

3. Recognises the social and economic benefits associated with Big Data, especially in relation to health research, public safety, open government, democracy and administration, scientific breakthroughs, manufacturing, banking, insurance, telecom, education, high tech, retail, geospatial, services, automotive, media and entertainment, energy and utilities;

Or. fi

Amendment 30
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 3 a (new)

Draft motion for a resolution

3 a. Calls on the Commission to ensure the funding of research on the consequences of using data in certain ways, including the risk of drawing wrong conclusions based on merely random correlations, and on ethical and moral questions, such as statistics-based "normalization" of certain behaviours and the impact on individual freedoms and consumer choice;

Amendment

Or. en

Amendment 31
Cornelia Ernst
Draft motion for a resolution
Paragraph 3 a (new)

*Draft motion for a resolution*

3 a. Calls on the Commission to ensure the funding of research on the consequences of using data in certain ways, including the risk of drawing wrong conclusions based on merely random correlations, and on ethical and moral questions, such as statistics-based "normalization" of certain behaviours and the impact on individual freedoms and consumer choice;

*Amendment*

Or. en

Amendment 32
Michał Boni, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek

Draft motion for a resolution
Paragraph 3 a (new)

*Draft motion for a resolution*

3 a. Ensuring the better conditions for proper legislative framework and adequate economic initiatives are needed for "Big data" sector growth. The EU can play a leading role worldwide by creating a favourable environment for innovative technological developments.

*Amendment*

Or. en

Amendment 33
Renato Soru, Patrizia Toia

Draft motion for a resolution
Paragraph 4
Draft motion for a resolution

4. Believes that the value of a company also resides in data; asks for awareness raising initiatives among SMEs to ensure an enhanced role for SMEs as Research, Development and Innovation (RDI) providers to foster growth and establish Europe as a main player in Big Data;

Amendment

4. Believes that data represents a valuable asset for companies, which could be significantly increased through the development of innovative and smart ways allowing for integration of companies-owned data with other available data; asks for awareness raising initiatives among SMEs on the development opportunities connected with a smart use of own data in connection with others; furthermore, asks to focus on the potential for growth and increased efficiency for SMEs in this sector, so to support the development of Europe as a main player in Big Data;

Or. en

Amendment 34
David Borrelli, Dario Tamburrano

Draft motion for a resolution
Paragraph 4

4. Believes that the value of a company also resides in data; asks for awareness raising initiatives among SMEs of the asset value of their data and to ensure an enhanced role for SMEs as Research, Development and Innovation (RDI) providers to foster growth and establish Europe as a main player in Big Data;

Amendment

4. Believes that the value of a company also resides in data; asks for awareness raising initiatives among SMEs of the asset value of their data to foster the growth of SMEs themselves, to establish them as a main player in Big Data and to ensure an enhanced role for SMEs as Research, Development and Innovation (RDI) providers;

Or. it

Amendment 35
Michel Reimon
on behalf of the Verts/ALE Group
Draft motion for a resolution
Paragraph 4

Draft motion for a resolution

4. Believes that the value of a company also resides in **data**; asks for awareness raising initiatives among SMEs of the **asset value of their data** and to **ensure an enhanced role for SMEs as Research, Development and Innovation (RDI) providers to foster growth and establish Europe as a main player in Big Data**;

4. Believes that the value of a company also resides in **its data handling capacities**; asks for awareness raising initiatives among SMEs of the **opportunities of data-processing, the importance of a well prepared employees** and to **enhance the role of SMEs as Research, Development and Innovation (RDI) providers to foster growth**;

Or. en

Amendment 36
Anne Sander

Draft motion for a resolution
Paragraph 4

Draft motion for a resolution

4. Believes that the value of a company also resides in **data**; asks for awareness raising initiatives among SMEs of the **asset value of their data** and to **ensure an enhanced role for SMEs as Research, Development and Innovation (RDI) providers to foster growth and establish Europe as a main player in Big Data**;

4. Believes that the value of a company also resides in **data**; **calls on all medium-sized companies to recruit ‘chief digital officers’ to develop data exploitation**; asks for awareness raising initiatives among SMEs of the **asset value of their data** and to **ensure an enhanced role for SMEs as Research, Development and Innovation (RDI) providers to foster growth and establish Europe as a main player in Big Data**;

Or. fr

Amendment 37
Kaja Kallas, Fredrick Federley, Philippe De Backer, Pavel Telička, Marietje Schaake

Draft motion for a resolution
Paragraph 4
4. Believes that the value of a company also resides in data; asks for awareness raising initiatives among SMEs of the asset value of their data and to ensure an enhanced role for SMEs as Research, Development and Innovation (RDI) providers to foster growth and establish Europe as a main player in Big Data;

4. Believes that the value of a company also resides in data; asks for awareness raising initiatives among SMEs of the asset value of their data and **ways to translate the use of data into business models and** to ensure an enhanced role for SMEs as Research, Development and Innovation (RDI) providers to foster growth and establish Europe as a main player in Big Data;

Or. en

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**Amendment 38**

Barbara Kappel

**Draft motion for a resolution**

**Paragraph 4**

4. Believes that the value of a company also resides in data; asks for awareness raising initiatives among SMEs of the asset value of their data and to ensure an enhanced role for SMEs as Research, Development and Innovation (RDI) providers to foster growth and establish Europe as a **main player** in Big Data;

4 a. Believes it is necessary to tackle

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**Amendment 39**

Barbara Kappel

**Draft motion for a resolution**

**Paragraph 4 a (new)**

4. Believes that the value of a company also resides in data; asks for awareness raising initiatives among SMEs of the asset value of their data and to ensure an enhanced role for SMEs as Research, Development and Innovation (RDI) providers to foster growth and establish Europe as a **global leader** in Big Data;

Or. en
problems in the value chain, including innovative interrupters in intellectual capital, accessibility and infrastructure, as well as to tackle market fragmentation, fragmented data standards, sector specific requirements and legal aspects of dataset ownership, access and re-use, such as open public data, in order to unlock the potential of Big Data.

Draft motion for a resolution
Paragraph 4 a (new)

Draft motion for a resolution

4a. Considers that at all events the extent and intensity of the use of these technologies should be carefully assessed in order to guide their development towards criteria of full awareness and caution, assigning to them an instrumental role in human activity;

Draft motion for a resolution

 Amendemen

4 a. Encourages the Commission to envisage more and more streamlined procedures for the assignment of grants, and to devote a substantial amount of resources from the R&D budget to
research and innovation projects in the field of ICT, including Big Data.

Or. en

Amendment 42
Cornelia Ernst

Draft motion for a resolution
Paragraph 4 a (new)

Draft motion for a resolution

4 a. Stresses that a data-driven economy can and should to a huge extent be based on anonymous or anonymized data;

Or. en

Amendment 43
Barbara Kappel

Draft motion for a resolution
Paragraph 4 b (new)

Draft motion for a resolution

4 b. Points out, that due to many different vertical, interrelated components on many different interrelated horizontal layers, the complexity to set standards for Big Data is very high due to the domain specific nature of data for different sectors; asks therefore the Commission to develop a Big Data Standard Strategy for identifying chances of the European Big Data industry, including SMEs and important European sectors

Or. en
Amendment 44
Cornelia Ernst

Draft motion for a resolution
Paragraph 4 b (new)

Draft motion for a resolution

Amendment

4 b. Stresses that processing of certain kind of data, in particular personal data, falls under the scope of EU data protection law. Urges in this regard the swift adoption of the Data Protection Package.

Or. en

Amendment 45
Barbara Kappel

Draft motion for a resolution
Paragraph 4 c (new)

Draft motion for a resolution

Amendment

4 c. Notes the importance of Open Data as high-quality raw material for the development of value-added information services and products; encourages therefore Member States and the Commission to further increase the online availability of public sector information and to actively promote its re-use.

Or. en

Amendment 46
Cornelia Ernst

Draft motion for a resolution
Paragraph 4 c (new)
Draft motion for a resolution

4 c. Points out that strong European rules on data protection are also an asset for SMEs in Europe, in particular following the revelations by Edward Snowden in 2013.

Or. en

Amendment 47
Cornelia Ernst

Draft motion for a resolution
Paragraph 4 d (new)

Draft motion for a resolution
4 d. Points out that a clear distinction must be made between the processing of personal data and other kind of data; believes that all data protection principles and rules must be adhered to processing of big data.

Or. en

Amendment 48
Cornelia Ernst

Draft motion for a resolution
Paragraph 4 e (new)

Draft motion for a resolution
4 e. Points in particular to the new principle of data protection by design that can play a major role in fostering a trust-based economy.

Or. en
Amendment 49
Cornelia Ernst

Draft motion for a resolution
Paragraph 4 f (new)

Draft motion for a resolution

Amendment

4 f. Is concerned that some technologies referred to in the context of big data could be used to increase corporate and government surveillance;

Or. en

Amendment 50
Martina Werner

Draft motion for a resolution
Paragraph 5

Draft motion for a resolution

Amendment

5. Points out that data protection and Big Data opportunities are not mutually exclusive; urges that public policy shall foster opportunities such as in RDI, Internet of Things (IoT), Industrial Internet and the digitalization of the European economy while tackling technological and social challenges of Big Data such as lack of awareness, rules on access, control and ownership, trust in data safety, interoperability, portability, reusability, security, privacy, data protection, intellectual capital, accessibility, infrastructure, market fragmentation and standards;

5. Stresses that data protection is the fundamental precondition for exploiting Big Data opportunities; urges that public policy tackle technological and social challenges of Big Data, particularly data protection, the protection of privacy, rights of control and ownership of data, access, reusability, trust in data safety and network security; in addition, lack of awareness, interoperability, portability, intellectual capital, accessibility, infrastructure, market fragmentation and standards; considers that only in this way can the opportunities which exist in the fields of RDI, Internet of Things (IoT), Industrial Internet and the digitalization of the European economy be successfully exploited;

Or. de
Amendment 51
David Borrelli, Dario Tamburrano

Draft motion for a resolution
Paragraph 5

5. Points out that data protection and Big Data opportunities are not mutually exclusive; urges that public policy shall foster opportunities such as in RDI, Internet of Things (IoT), Industrial Internet and the digitalization of the European economy while tackling technological and social challenges of Big Data such as lack of awareness, rules on access, control and ownership, trust in data safety, interoperability, portability, reusability, security, privacy, data protection, intellectual capital, accessibility, infrastructure, market fragmentation and standards;

Amendment

5. Points out that data protection and opportunities arising from the integrated use of data are not mutually exclusive; urges that public policy shall foster opportunities such as in direct democracy, RDI, Internet of Things (IoT), Industrial Internet and the digitalization of the European economy; considers it essential at the same time to develop a regulatory framework to tackle technological, social and cultural challenges of Big Data such as access, control and ownership, the security, privacy and protection of data, their interoperability, portability and reusability, intellectual capital, accessibility, infrastructure, market fragmentation and lack of awareness;

Or. it

Amendment 52
Renato Soru, Patrizia Toia

Draft motion for a resolution
Paragraph 5

Draft motion for a resolution

5. Points out that data protection and Big Data opportunities are not mutually exclusive; urges that public policy shall foster opportunities such as in RDI, Internet of Things (IoT), Industrial Internet and the digitalization of the European economy while tackling technological and social challenges of Big Data such as lack of awareness, rules on access, control and ownership, trust in data safety,

Amendment

5. Points out that a smart use of Big Data opportunities could ensure compatibility with data protection; urges that public policy seize any opportunity to foster the development of Big Data potential opportunities such as in Internet of Things (IoT), Industrial Internet and the digitalization of the European economy while tackling technological and social challenges of Big Data such as lack of
interoperability, portability, reusability, security, privacy, data protection, *intellectual capital, accessibility*, infrastructure, market fragmentation and standards;

awareness, rules on access, control and ownership of data, interoperability, portability, reusability, *networks* security, privacy, data protection, infrastructure, market fragmentation and standards;

Amendment 53  
Michel Reimon  
on behalf of the Verts/ALE Group

**Draft motion for a resolution**  
**Paragraph 5**

5. Points out that data protection and Big Data opportunities are not mutually exclusive; urges that public policy shall foster opportunities such as in RDI, Internet of Things (IoT), Industrial Internet and the digitalization of the European economy while tackling technological and social challenges of *Big Data* such as lack of *awareness*, rules on access, control and ownership, *trust in data safety*, interoperability, portability, reusability, security, privacy, data protection, intellectual capital, accessibility, infrastructure, market fragmentation and standards;

Amendment 54  
Michał Boni, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek, Adina-Ioana Vălean, Lambert van Nistelrooij

**Draft motion for a resolution**  
**Paragraph 5**
Draft motion for a resolution

5. Points out that data protection and Big Data opportunities are not mutually exclusive; urges that public policy shall foster opportunities such as in RDI, Internet of Things (IoT), Industrial Internet and the digitalization of the European economy while tackling technological and social challenges of Big Data such as lack of awareness, rules on access, control and ownership, trust in data safety, interoperability, portability, reusability, security, privacy, data protection, intellectual capital, accessibility, infrastructure, market fragmentation and standards;

Amendment

5. Points out that data protection and Big Data development are not mutually exclusive; urges that public policy shall foster opportunities such as in RDI, Internet of Things (IoT), e-health, Industrial Internet and the digitalization of the European economy while tackling technological and social challenges of Big Data such as lack of awareness, rules on access, control and ownership, trust in data safety, interoperability, portability, reusability, security, secure data storage, privacy, data protection, intellectual capital, accessibility, infrastructure, market fragmentation and standards;

Or. en

Amendment 55
Barbara Kappel

Draft motion for a resolution
Paragraph 5

Draft motion for a resolution

5. Points out that data protection and Big Data opportunities are not mutually exclusive and that there is an essential need for a flexible framework that fosters growth and innovation while supporting the principles and high standards of data protection in a future-proof manner that enables a fast changing data use landscape to prosper. Urges that public policy shall foster opportunities such as in RDI, Internet of Things (IoT), Industrial Internet and the digitalization of the European economy while tackling technological and social challenges of Big Data such as lack of awareness, rules on access, control and ownership, trust in data safety, interoperability, portability, reusability, security, privacy, data protection, intellectual capital, accessibility, infrastructure, market fragmentation and standards;

Amendment

5. Points out that data protection and Big Data opportunities are not mutually exclusive; urges that public policy shall foster opportunities such as in RDI, Internet of Things (IoT), Industrial Internet and the digitalization of the European economy while tackling technological and social challenges of Big Data such as lack of awareness, rules on access, control and ownership, trust in data safety, interoperability, portability, reusability, security, privacy, data protection, intellectual capital, accessibility, infrastructure, market fragmentation and standards;
reusability, security, privacy, data protection, intellectual capital, accessibility, infrastructure, market fragmentation and standards;

**Amendment 56**
Kaja Kallas, Fredrick Federley, Philippe De Backer, Pavel Telička, Marietje Schaake

**Draft motion for a resolution**
**Paragraph 5**

<table>
<thead>
<tr>
<th>Draft motion for a resolution</th>
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<tr>
<td>5. Points out that data protection and Big Data opportunities are not mutually exclusive; urges that public policy shall foster opportunities such as in RDI, Internet of Things (IoT), Industrial Internet and the digitalization of the European economy while tackling technological and social challenges of Big Data such as lack of awareness, rules on access, control and ownership, trust in data safety, interoperability, portability, reusability, security, privacy, data protection, intellectual capital, accessibility, infrastructure, market fragmentation and standards; Considers that ensuring trust in these technologies should be at the heart of both public policy and business models as a lack of trust can greatly damage growth and innovation in the digital sector;</td>
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</tr>
</tbody>
</table>

**Amendment 57**
Anne Sander

**Draft motion for a resolution**
**Paragraph 5**
Draft motion for a resolution

5. Points out that data protection and Big Data opportunities are not mutually exclusive; urges that public policy shall foster opportunities such as in RDI, Internet of Things (IoT), Industrial Internet and the digitalization of the European economy while tackling technological and social challenges of Big Data such as lack of awareness, rules on access, control and ownership, trust in data safety, interoperability, portability, reusability, security, privacy, data protection, intellectual capital, accessibility, infrastructure, market fragmentation and standards;

Amendment

5. Points out that data protection and Big Data opportunities are not mutually exclusive; urges that public policy shall foster opportunities such as in RDI, Internet of Things (IoT), Industrial Internet and the digitalization of the European economy while tackling technological and social challenges of Big Data such as lack of awareness, rules on access, control and ownership, trust in data safety, interoperability, portability, reusability, security, privacy, data protection, intellectual capital, accessibility, infrastructure, market fragmentation and standards; maintains that data protection has to start when products are being designed and that, to that end, the ‘privacy by design’ principle should be applied as widely as possible;

Or. fr

Amendment 58
Paul Rübig

Draft motion for a resolution
Paragraph 5

5. Points out that data protection and Big Data opportunities are not mutually exclusive; urges that public policy shall foster opportunities such as in RDI, Internet of Things (IoT), Industrial Internet and the digitalization of the European economy while tackling technological and social challenges of Big Data such as lack of awareness, rules on access, control and ownership, trust in data safety, interoperability, portability, reusability, security, privacy, data protection, intellectual capital, accessibility, infrastructure, market fragmentation and standards;

Amendment

5. Points out that data protection and Big Data opportunities are not mutually exclusive; calls for the adoption of uniform legal preconditions for data protection and therefore the repeal of sector-specific data protection rules (e-Privacy Directive); urges that public policy shall foster opportunities such as in RDI, Internet of Things (IoT), Industrial Internet and the digitalization of the European economy while tackling technological and social challenges of Big Data such as lack of awareness, rules on access, control and
infrastructure, market fragmentation and standards; ownership, trust in data safety, interoperability, portability, reusability, security, privacy, data protection, intellectual capital, accessibility, infrastructure, market fragmentation and standards;

Amendment 59
José Blanco López, Inmaculada Rodríguez-Piñero Fernández

Draft motion for a resolution
Paragraph 5

5. Points out that data protection and Big Data opportunities are not mutually exclusive; urges that public policy shall foster opportunities such as in RDI, Internet of Things (IoT), Industrial Internet and the digitalization of the European economy while tackling technological and social challenges of Big Data such as lack of awareness, rules on access, control and ownership, trust in data safety, interoperability, portability, reusability, security, privacy, data protection, intellectual capital, accessibility, infrastructure, market fragmentation and standards;

5. Points out that data protection and Big Data opportunities are not mutually exclusive; urges that public policy shall foster opportunities such as in RDI, Internet of Things (IoT), Industrial Internet and the digitalization of the European economy while tackling economic, technological, and social challenges of Big Data such as lack of awareness, rules on access, control and ownership, trust in data safety, interoperability, portability, reusability, security, privacy, data protection, intellectual capital, accessibility, infrastructure, market fragmentation and standards;

Amendment 60
Barbara Kappel

Draft motion for a resolution
Paragraph 5 a (new)

5 a. Notes in particular that Big Data is
predicated on re-using and cross-referencing data in new ways and implies a wide range of data sources; as such, purpose limitation, notice and consent principles should not be interpreted in such a restrictive manner that it prohibits effective collection or re-use of data; observes furthermore, that the value of Big Data relies on the ability to develop targeted, individualised approaches; as a result calls for profiling that is calibrated to user expectations and beneficial to the data subject.

Or. en

Amendment 61
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 5 a (new)

5 a. Points out that the issues surrounding the processing of personal data fall fully into the scope of EU data protection rules, which are currently applied in 28 different ways in the Member States; deplores the fact that this aspect of the development of a truly European data-driven economy is hampered by the delays in having a General Data Protection Regulation;

Or. en

Amendment 62
Barbara Kappel

Draft motion for a resolution
Paragraph 5 b (new)
5 b. Asks the Commission to devise a gatekeeper policy with regard to Big Data to clarify ownership.

Or. en

Amendment 63
Renato Soru, Patrizia Toia

Draft motion for a resolution
Paragraph 6

6. Stresses that the insufficient availability of broadband infrastructure, networked high performance computing infrastructure and cloud computing facilities hamper Big Data development, risking Europe to trail behind technologically and economically;

6. Notes that Big Data depends on a wider ICT ecosystem to succeed, including IoT for sourcing, broadband networks for transporting and cloud computing for processing data; expresses concerns that the insufficient availability of broadband infrastructure, networked high performance computing infrastructure and cloud computing facilities could cause Europe to trail behind technologically and economically;

Or. en

Amendment 64
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 6

6. Stresses that the insufficient availability of broadband infrastructure, networked high performance computing infrastructure and cloud computing facilities hamper Big Data development, risking Europe to trail behind technologically and economically;

6. Stresses that the digital divide, insufficient availability of broadband infrastructure, networked high performance computing infrastructure and cloud computing facilities could cause Europe to trail behind technologically and economically;
Data development, risking Europe to trail behind technologically and economically; computing facilities hamper a data-driven economic development, risking Europe to trail behind technologically and economically;

Or. en

Amendment 65
José Blanco López, Inmaculada Rodríguez-Piñero Fernández

Draft motion for a resolution
Paragraph 6

Draft motion for a resolution Amendment

6. Stresses that the insufficient availability of broadband infrastructure, networked high performance computing infrastructure and cloud computing facilities hamper Big Data development, risking Europe to trail behind technologically and economically; 6. Stresses that the insufficient availability of broadband infrastructure, networked high performance computing infrastructure and cloud computing facilities hampers Big Data development, with the risk that Europe will trail behind technologically and economically; as regards the European Fund for Strategic Investments, calls for priority to be given to investment in the rollout of such infrastructure, while also seeking to combat the digital divide in the regions most affected by ageing and depopulation;

Or. es

Amendment 66
Anne Sander

Draft motion for a resolution
Paragraph 6

Draft motion for a resolution Amendment

6. Stresses that the insufficient availability of broadband infrastructure, networked high performance computing infrastructure and cloud computing facilities hamper Big Data development, risking Europe to trail behind technologically and economically; 6. Stresses that the insufficient availability of broadband infrastructure, networked high performance computing infrastructure and cloud computing facilities, and the lack of technical standardisation and
behind technologically and economically; proper data protection legislation, hamper Big Data development, with the risk that Europe will trail behind technologically and economically;

Amendment 67
Clare Moody, Jude Kirton-Darling, Theresa Griffin

Draft motion for a resolution
Paragraph 6

Draft motion for a resolution Amendment

6. Stresses that the insufficient availability of broadband infrastructure, networked high performance computing infrastructure and cloud computing facilities hamper Big Data development, risking Europe to trail behind technologically and economically;

6. Stresses that the insufficient availability and unequal distribution of broadband infrastructure, networked high performance computing infrastructure and cloud computing facilities hamper Big Data development, risking Europe to trail behind technologically and economically;

Amendment 68
Barbara Kappel

Draft motion for a resolution
Paragraph 6a (new)

Draft motion for a resolution Amendment

6a. Points out, that without the elaboration of common standards and of targeted measures to establish a secure and innovation-friendly regulatory framework for Big Data, Europe and its enterprises run at risk to lose their data-sovereignty; points out that standards need to be complemented by measures in interoperability and certification to foster trust in connections and European cloud facilities
Amendment 69
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 6 a (new)

Draft motion for a resolution

Amendment

6 a. Stresses that the data generated by public institutions, using public funds, should become available for the European citizens under an open access model.

Amendment 70
Cornelia Ernst

Draft motion for a resolution
Paragraph 6 a (new)

Draft motion for a resolution

Amendment

6 a. Calls for improved support and incentives for cooperative and municipal investments in broadband infrastructure, which will also facilitate broadband coverage in rural areas.

Amendment 71
Michal Boní, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek, Krišjānis Kariņš

Draft motion for a resolution
Paragraph 6 a (new)
Draft motion for a resolution

Amendment

6 a. Points out that collecting, processing, making analytical effort on information and data require the high performance computing infrastructure, and secure storages, which is related to the cloud development in Europe;

Or. en

Amendment 72
Michał Boni, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek, Adina-Ioana Vălean

Draft motion for a resolution
Paragraph 6 b (new)

Draft motion for a resolution

Amendment

6 b. Acknowledges the open and global character of the Internet and notes that requirements on localization of the storage of data would not mitigate the risks with regard to cybersecurity, but would undermine users' rights and, therefore, affect the social and economic potential of Big Data for the European Union;

Or. en

Amendment 73
Cornelia Ernst

Draft motion for a resolution
Paragraph 6 b (new)

Draft motion for a resolution

Amendment

6 b. Stresses that the data generated by public institutions, using public funds, should become available for the European
citizens under an open access model.

Amendment 74
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 7

Draft motion for a resolution Amendment

7. Supports the development of market-driven, voluntary and technology neutral standards; recognizes preliminary work of forums such as ISA/IEC, ITU-T and NIST;

deleted

Or. en

Amendment 75
Cornelia Ernst

Draft motion for a resolution
Paragraph 7

Draft motion for a resolution Amendment

7. Supports the development of market-driven, voluntary and technology neutral standards; recognizes preliminary work of forums such as ISA/IEC, ITU-T and NIST;

deleted

Or. en

Amendment 76
Kaja Kallas, Fredrick Federley, Philippe De Backer, Pavel Telička, Marietje Schaake

Draft motion for a resolution
Paragraph 7
Draft motion for a resolution

7. Supports the development of market-driven, voluntary and technology neutral standards; recognizes preliminary work of forums such as ISA/IEC, ITU-T and NIST;

Amendment

7. Acknowledges the importance of interoperability and standards to boost competitiveness in the ICT sector and of a proactive role by the European Commission in mandating standardising bodies; Supports the development of market-driven, voluntary and open standards; recognizes the work of standard setting organisations such as ETSI and ITU-T;

Or. en

Amendment 77
Anne Sander

Draft motion for a resolution
Paragraph 7

Draft motion for a resolution

7. Supports the development of market-driven, voluntary and technology neutral standards; recognizes preliminary work of forums such as ISA/IEC, ITU-T and NIST;

Amendment

7. Supports the development of market-driven, voluntary and technology neutral standards; recognizes preliminary work of forums such as ISO/IEC, ITU-T and NIST; considers it essential for the EU and its standardisation bodies to be prime movers in this standard-setting process;

Or. fr

Amendment 78
David Borrelli, Dario Tamburrano

Draft motion for a resolution
Paragraph 7

Draft motion for a resolution

7. Supports the development of market-driven, voluntary and technology neutral standards;

Amendment

7. Supports the development of standards inspired by the market which are
standards; recognizes preliminary work of forums such as ISA/IEC, ITU-T and NIST; technology-neutral and adopted by means of an inclusive and participatory approach; recognizes preliminary work of forums such as ISA/IEC, ITU-T and NIST;

Amendment 79
Renato Soru, Patrizia Toia

Draft motion for a resolution
Paragraph 7

7. Supports the development of market-driven, voluntary and technology neutral standards; recognizes preliminary work of forums such as ISA/IEC, ITU-T and NIST;

Amendment

7. Supports the development of market-driven, open, voluntary and transparent standards; recognizes the preliminary work from ITU-T, ETSI, CEN and CENELEC;

Or. en

Amendment 80
Constanze Krehl

Draft motion for a resolution
Paragraph 7

7. Supports the development of market-driven, voluntary and technology neutral standards; recognizes preliminary work of forums such as ISA/IEC, ITU-T and NIST;

Amendment

7. Supports the development of market-driven, internationally compatible standards; recognizes preliminary work of forums such as ISA/IEC, ITU-T and NIST;

Or. de

Amendment 81
Michał Boni, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek, Adina Ioana Vălean, Lambert van Nistelrooij
7. Supports the development of market-driven, voluntary and technology neutral standards; recognizes preliminary work of forums such as ISA/IEC, ITU-T and NIST;

Amendment 82
Barbara Kappel

7. Supports the development of market-driven, voluntary, transparent and technology neutral standards; recognizes the work of standardisation forums such as ISA/IEC, ITU-T, ETSI, 3GPP, CEN, CENELEC, and NIST\(^1\);

\(^1\) 3GPP is the organisation developing standards for mobile technology, and since mobile will be the backbone of data driven economy it is worth to recognize its contribution; ETSI – gives European contribution in global standards. The CEN-CENELEC support the standards-making process and facilitate a better awareness and understanding of the standardization system among stakeholders in Europe.
inclusive of all stakeholders to ensure market relevance;

Amendment 83
András Gyürk

Draft motion for a resolution
Paragraph 7

Draft motion for a resolution
7. Supports the development of market-driven, voluntary and technology neutral standards; recognizes preliminary work of forums such as ISA/IEC, ITU-T and NIST;

Amendment
7. Supports the development of market-driven, voluntary and technology neutral standards; recognizes preliminary work of forums such as ISA/IEC, ITU-T and NIST; encourages close cooperation with ENISA;

Or. en

Amendment 84
Constanze Krehl

Draft motion for a resolution
Paragraph 7 a (new)

Draft motion for a resolution
7a. Stresses that standard-essential patents are an important element of standardisation and, for a significant number of European ICT undertakings, a component of their business model; observes that the introduction and enforcement of standard-essential patents contributes to the writing-off of parts of R&D expenditure and helps to generate growth and employment, to provide funding for R&D both at universities and elsewhere and to gain international recognition for European standards;

Amendment
7a. Stresses that standard-essential patents are an important element of standardisation and, for a significant number of European ICT undertakings, a component of their business model; observes that the introduction and enforcement of standard-essential patents contributes to the writing-off of parts of R&D expenditure and helps to generate growth and employment, to provide funding for R&D both at universities and elsewhere and to gain international recognition for European standards;
Amendment 85
Barbara Kappel

Draft motion for a resolution
Paragraph 7 a (new)

Draft motion for a resolution

Amendment

7 a. Stresses that, given the restrictive data-protection laws, more effort is necessary with regard to anonymization, pseudonymization of data, provided to fully exploit the benefits of Big Data.

Amendment 86
David Borrelli, Dario Tamburrano

Draft motion for a resolution
Paragraph 8

Draft motion for a resolution

Amendment

8. Urges the adoption of a more detailed, multi-layered and evidence-based action plan for advancing a data driven economy;

8. Welcomes the Commission proposal to develop an ‘initiative on the free movement of data’, and deplores the fact that it cannot already be adopted in 2015; considers that this initiative will have to be more detailed, multi-layered and evidence-based for the purpose of advancing a data-driven economy;

Amendment 87
Kaja Kallas, Fredrick Federley, Philippe De Backer, Pavel Telička, Marietje Schaake

Draft motion for a resolution
Paragraph 8
Draft motion for a resolution

8. Urges the adoption of a more detailed, multi-layered and evidence-based action plan for advancing a data driven economy;

Draft motion for a resolution

8. Urges the adoption of a more detailed, multi-layered and evidence-based action plan for advancing a data driven economy:

For that purpose, calls on the Commission to carry out a broad and transparent review on big data aiming at anticipating the needs of big data technologies and removing barriers to innovation in Europe;

Or. en

Amendment 88
Barbara Kappel

Draft motion for a resolution
Paragraph 8

Draft motion for a resolution

8. Urges the adoption of a more detailed, multi-layered and evidence-based action plan for advancing a data driven economy;

Draft motion for a resolution

8. Urges the adoption of a more detailed, multi-layered and evidence-based action plan for advancing a data driven economy of the future and addressing Europe's future societal challenges;

Or. en

Amendment 89
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Subheading 2

Draft motion for a resolution

Investing in Big Data (Infrastructure and R&D)

Draft motion for a resolution

Investing for a Data-driven economy (Infrastructure and R&D)

Or. en
Amendment 90
Renato Soru, Patrizia Toia

Draft motion for a resolution
Paragraph 9

Draft motion for a resolution
Amendment

9. Notes that Big Data depends on a wider ICT ecosystem to succeed, including IoT for sourcing, broadband networks for transporting and cloud computing for processing data;

Or. en

Amendment 91
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 9

Draft motion for a resolution
Amendment

9. Notes that Big Data depends on a wider ICT ecosystem to succeed, including IoT for sourcing, broadband networks for transporting and cloud computing for processing data;

9. Notes that a data-driven economy depends on a wider ICT ecosystem to succeed, including skilled employees, access to data, interoperability, broadband networks for transporting, and facilities for processing the data;

Or. en

Amendment 92
Krišjānis Kariņš

Draft motion for a resolution
Paragraph 9
Draft motion for a resolution

9. Notes that Big Data depends on a wider ICT ecosystem to succeed, including IoT for sourcing, broadband networks for transporting and cloud computing for processing data;

Amendment

9. Notes that Big Data sector's success depends on a much broader ICT ecosystem, including IoT for sourcing, broadband networks for transporting and cloud computing for processing data;

Or. en

Amendment 93
Nicola Caputo

Draft motion for a resolution
Paragraph 9

Draft motion for a resolution

9. Notes that Big Data depends on a wider ICT ecosystem to succeed, including IoT for sourcing, broadband networks for transporting and cloud computing for processing data;

Amendment

9. Notes that Big Data depends on a wider ICT ecosystem to succeed, including IoT and wearable technologies for sourcing, broadband networks for transporting and cloud computing for processing data;

Or. it

Amendment 94
Anne Sander

Draft motion for a resolution
Paragraph 9

Draft motion for a resolution

9. Notes that Big Data depends on a wider ICT ecosystem to succeed, including IoT for sourcing, broadband networks for transporting and cloud computing for processing data;

Amendment

9. Notes that Big Data depends on a wider ICT ecosystem to succeed, including IoT for sourcing, broadband networks for transporting and cloud computing for processing and hosting data;

Or. fr
Amendment 95
Miaapetra Kumpula-Natri

Draft motion for a resolution
Paragraph 9

9. Notes that Big Data depends on a wider ICT ecosystem to succeed, including IoT for sourcing, broadband networks for transporting and cloud computing for processing data;

Amendment
9. Notes that Big Data depends on a wider ICT ecosystem to succeed, including IoT for sourcing, broadband networks for transporting, data centres to store and process information and cloud computing for processing data;

Or. fi

Amendment 96
Evžen Tošenovský

Draft motion for a resolution
Paragraph 9 a (new)

Draft motion for a resolution

9 a. Highlights that high speed broadband is a pre-requisite of a successful digital economy, that EU broadband targets should be revised to be more ambitious and that processing and using of Big Data might demand investment in super-high speeds;

Amendment

9 a. Stresses that a greater coordination is

Or. en
needed in order to apply openness to standards and interoperability in systems and collaboration platforms

Or. en

Amendment 98
Evžen Tošenovský

Draft motion for a resolution
Paragraph 9 b (new)

Draft motion for a resolution

9 b. Reminds that private sector investment should remain essential in network infrastructure; and encourages in this regard the Commission and Member States to stimulate investments in network infrastructure through a positive regulatory framework and to continue supporting the broadband infrastructure through existing programmes such as Connecting Europe Facility, EFSI and cohesion funds only in areas with identified market failures;

Or. en

Amendment 99
Evžen Tošenovský

Draft motion for a resolution
Paragraph 9 c (new)

Draft motion for a resolution

9 c. Underlines the importance of investment in the supercomputing centres, as gradually increasing amount of processed big data requires regular upgrade of their performance.

Or. en
Amendment 100
Renato Soru, Patrizia Toia

Draft motion for a resolution
Paragraph 10

Draft motion for a resolution

10. Believes that the EU must direct R&D funding on Big Data innovation that brings aggregated added value for citizens, society and the economy; asks to better foster market entry of innovations and the development of new algorithms and analytical tools;

Amendment

10. Believes that the EU should increase R&D funding on Big Data innovation and market development to bring added value for citizens, society and the economy; asks to support the increase of market application of innovations and the development of innovative products and services;

Or. en

Amendment 101
David Borrelli, Dario Tamburrano

Draft motion for a resolution
Paragraph 10

Draft motion for a resolution

10. Believes that the EU must direct R&D funding on Big Data innovation that brings aggregated added value for citizens, society and the economy; asks to better foster market entry of innovations and the development of new algorithms and analytical tools;

Amendment

10. Believes that the EU must provide adequate funding for research and innovation relating to the integrated use of data, so that the introduction of innovations that bring aggregated added value for citizens, society and the economy is fostered more effectively in order, inter alia, to develop new algorithms and analytical tools;

Or. it

Amendment 102
Michel Reimon
on behalf of the Verts/ALE Group
Draft motion for a resolution
Paragraph 10

Draft motion for a resolution

10. Believes that the EU must direct R&D funding on Big Data innovation that \textit{brings} aggregated added value for citizens, society and the economy; asks to better foster \textit{market entry of innovations} and the development of new algorithms and analytical tools;

Amendment

10. Believes that the EU must direct R&D funding on data innovation that \textit{was clearly identified as bringing} aggregated added value for citizens, society and the economy; asks to better foster \textit{innovation} and the development of new algorithms and analytical tools \textit{that will promote an ethical approach to data processing};

Or. en

Amendment 103
Soledad Cabezón Ruiz, José Blanco López, Inmaculada Rodríguez-Piñero Fernández

Draft motion for a resolution
Paragraph 10

Draft motion for a resolution

10. Believes that the EU must direct R&D funding on Big Data innovation that \textit{brings} aggregated added value for citizens, society and the economy; asks to better foster market entry of innovations and the development of new algorithms and analytical tools;

Amendment

10. \textit{Considers that a joint European road map for Member States and the EU needs to be drawn up for the medium to long term and combined with a stable funding framework making it possible to progress towards e-research}; believes that the EU must direct R&D funding on Big Data \textit{e-infrastructure and innovation} that \textit{bring} aggregated added value for citizens, society and the economy; asks to better foster market entry of innovations and the development of new algorithms and analytical tools;

Or. es

Amendment 104
José Blanco López, Inmaculada Rodríguez-Piñero Fernández
Draft motion for a resolution
Paragraph 10

10. Believes that the EU must direct R&D funding on Big Data innovation that brings aggregated added value for citizens, society and the economy; asks to better foster market entry of innovations and the development of new algorithms and analytical tools;

Amendment

10. Believes that the EU must direct R&D funding on Big Data innovation that brings aggregated added value for citizens, society and the economy and in terms of data security and protection to forestall potential threats; asks to better foster market entry of innovations and the development of new algorithms and analytical tools;

Or. es

Amendment 105
Nicola Caputo

Draft motion for a resolution
Paragraph 10

10. Believes that the EU must direct R&D funding on Big Data innovation that brings aggregated added value for citizens, society and the economy and in terms of data security and protection to forestall potential threats; asks to better foster market entry of innovations and the development of new algorithms and analytical tools;

Amendment

10. Believes that the EU must direct R&D funding on Big Data innovation that brings aggregated added value for citizens, society and the economy and medicine; asks to better foster market entry of innovations and the development of new algorithms, analytical tools and text and data mining;

Or. it

Amendment 106
Cornelia Ernst

Draft motion for a resolution
Paragraph 10

10. Believes that the EU must direct R&D funding on Big Data innovation that brings aggregated added value for citizens, society and the economy and in terms of data security and protection to forestall potential threats; asks to better foster market entry of innovations and the development of new algorithms and analytical tools;

Amendment

10. Believes that the EU must direct R&D funding on Big Data innovation that brings aggregated added value for citizens, society and the economy and medicine; asks to better foster market entry of innovations and the development of new algorithms, analytical tools and text and data mining;
funding on Big Data innovation that brings aggregated added value for citizens, society and the economy; asks to better foster market entry of innovations and the development of new algorithms and analytical tools; believes that this can be achieved by the use of free software;
Amendment 109
Cornelia Ernst

Draft motion for a resolution
Paragraph 11

Draft motion for a resolution Amendment

11. Takes note of the Commission's deleted initiatives to create PPPs on Big Data; asks for a platform on which these PPPs can share concerns, needs and requirements;

Amendment

Or. en

Amendment 110
Renato Soru, Patrizia Toia

Draft motion for a resolution
Paragraph 11

Draft motion for a resolution Amendment

11. Takes note of the Commission's initiatives to create PPPs on Big Data; asks for a platform on which these PPPs can share concerns, needs and requirements; 11. Takes note and supports the Commission's initiatives to create a Public-Private Partnership to support the development of the Big Data sector;

Amendment

Or. en

Amendment 111
David Borrelli, Dario Tamburrano

Draft motion for a resolution
Paragraph 11
Draft motion for a resolution

11. Takes note of the Commission's initiatives to create PPPs on Big Data; asks for a platform on which these PPPs can share concerns, needs and requirements;

Amendment

11. Takes note of the Commission's initiatives to maximise the potential of the digital economy, and advocates a cautious approach to the creation of PPPs on Big Data;

Or. it

Amendment 112
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution

Paragraph 11

Draft motion for a resolution

11. Takes note of the Commission's initiatives to create PPPs on Big Data; asks for a platform on which these PPPs can share concerns, needs and requirements;

Amendment

11. Takes note of the Commission's initiatives to create contractual Private-Public Partnerships (cPPPs) on Big Data;

Or. en

Amendment 113
Michal Boni, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek, Adina-Ioana Vălean, Lambert van Nistelrooij, Krišjānis Kariņš

Draft motion for a resolution

Paragraph 11

Draft motion for a resolution

11. Takes note of the Commission's initiatives to create PPPs on Big Data; asks for a platform on which these PPPs can share concerns, needs and requirements;

Amendment

11. Takes note of the Commission's initiatives to create PPPs on Big Data; Recognise the Commission and Europe's data industry have committed to invest €2.5 billion in a public-private partnership (PPP) that aims to strengthen the data sector and put Europe at the
forefront of the global data race; support
priorities of Big Data Value Association
on which these PPPs can share concerns,
needs and requirements. **the PPP will
strengthen Europe's big data community
and help lay the foundations for the
thriving data-driven economy of the
future;**
share concerns, needs and requirements; *public and private sectors is crucial for the identification of barriers to the development of big data technologies; asks therefore the Commission to set up a platform on which these PPPs can share concerns, needs and requirements;*

Amendment 116
Gunnar Hökmark

Draft motion for a resolution
Paragraph 11 a (new)

Draft motion for a resolution

Amendment

11 a. Underlines that sufficient data capacity is necessary in order to enable the development of new generations of services in the EU

Or. en

Amendment 117
Renato Soru, Patrizia Toia

Draft motion for a resolution
Paragraph 12

Draft motion for a resolution

Amendment

12. Welcomes the creation of innovation Spaces *that allow* experimentation with Big Data; underlines that they *shall* serve as business incubators;

12. Welcomes the creation of innovation spaces, *areas where pre-existing concentration of businesses and skills is present and can be increased, allowing experimentation with Big Data within an innovative cluster;* underlines that they *should* serve as business incubators, *supporting the growth and internationalization of SMEs and innovative start-ups;*

Or. en
Amendment 118
Barbara Kappel

Draft motion for a resolution
Paragraph 12

Draft motion for a resolution
12. Welcomes the creation of Innovation Spaces that allow experimentation with Big Data; underlines that they shall serve as business incubators;

Amendment
12. Welcomes the creation of Innovation Spaces that allow experimentation with Big Data; underlines that they shall serve as business incubators in addition to the launch of the Open Data Incubator for Europe (ODINE);

Or. en

Amendment 119
Anne Sander

Draft motion for a resolution
Paragraph 12

Draft motion for a resolution
12. Welcomes the creation of Innovation Spaces that allow experimentation with Big Data; underlines that they shall serve as business incubators;

Amendment
12. Welcomes the creation of Innovation Spaces that allow experimentation with Big Data; underlines that they shall serve as business incubators producing ecosystems and cross-sector industrial platform projects for the Internet of Everything;

Or. fr

Amendment 120
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 12
Draft motion for a resolution

12. Welcomes the creation of Innovation Spaces that allow experimentation with Big Data; underlines that they shall serve as business incubators;

Amendment

12. Welcomes the creation of Innovation Spaces that allow experimentation with Big Data; underlines that they can serve also as business incubators;

Draft motion for a resolution

Paragraph 12a (new)

12a. Considers that the ISA² programme offers an opportunity to develop interoperability standards for Big Data management within public administrations and in their dealings with businesses and citizens;

Amendment

12a. Considers that the ISA² programme offers an opportunity to develop interoperability standards for Big Data management within public administrations and in their dealings with businesses and citizens;
Amendment 123
Renato Soru, Martina Werner, Patrizia Toia

Draft motion for a resolution
Paragraph 13

13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents;

Amendment

13. Encourages the Commission and Member States to increase investments in a modern and future-proof infrastructure, and to adopt policies removing excessive barriers in innovative sectors; furthermore, encourages the Commission to support critical technologies for the collection of Big Data, such as the Internet of Things;

Or. en

Amendment 124
Michał Boni, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek, Adina-Ioana Vălean, Lambert van Nistelrooij, Krišjānis Kariņš, Angelika Niebler

Draft motion for a resolution
Paragraph 13

13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents;

Amendment

13. Encourages the Commission and Member States to put in place a regulatory framework that stimulates investments in network infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that incentivize investments in R&D and European standardization and address the current problem of large scale infringements of standard-essential patents, enable the IoT to flourish, such as making more harmonized spectrum available for mobile technology, in
Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents;
Amendment 126
Dominique Riquet

Draft motion for a resolution
Paragraph 13

Draft motion for a resolution

13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents;

Amendment

13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and encouraging standardisation by establishing a framework making for better protection of intellectual property rights and strict compliance with the fair, reasonable, and non-discriminatory nature of contractual patent licensing provisions;

Or. fr

Amendment 127
Theresa Griffin, Miapetra Kumpula-Natri, Catherine Stihler

Draft motion for a resolution
Paragraph 13

Draft motion for a resolution

13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short

Amendment

13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that support standardization and the effective conclusion of FRAND portfolio licenses
Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents; enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment.

Amendment 128
Pervenche Berès

Draft motion for a resolution
Paragraph 13

Draft motion for a resolution
13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents;

Amendment
13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, to continue the European standardisation efforts and to implement policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment.

Amendment 129
Anne Sander

Draft motion for a resolution
Paragraph 13

Draft motion for a resolution
13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents;

Amendment
13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy.
requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents;
13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devises, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents;

Amendment
13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that will enable technologies and a data-driven economy to flourish, such as making harmonized spectrum available, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents;

Or. en

Amendment 132
Kaja Kallas, Fredrick Federley, Philippe De Backer, Pavel Telička, Juan Carlos Girauta Vidal, Marietje Schaake

Draft motion for a resolution
Paragraph 13

Draft motion for a resolution

13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devises, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents;

Amendment
13. Encourages the Commission and Member States to better attract investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for wireless broadband communications, expanding 5G technology, encouraging IPv6 deployment and ensuring fair competition in standardisation processes, especially when involving standard-essential patents;

Or. en
Draft motion for a resolution
Paragraph 13

13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents;
Amendment 135
David Borrelli, Dario Tamburrano

Draft motion for a resolution
Paragraph 13

13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents; considers it necessary, however, to strike an appropriate balance between those investing in research and innovation to develop such essential patents and those who benefit from their existence;

Amendment

Evžen Tošenovský

Draft motion for a resolution
Paragraph 13

13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents; considers it necessary, however, to strike an appropriate balance between those investing in research and innovation to develop such essential patents and those who benefit from their existence;
connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents;

13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents; 

Or. en

Amendment 137
Enrico Gasbarra

Draft motion for a resolution
Paragraph 13

Draft motion for a resolution

13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents; 

Amendment

13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents; considers it necessary, however, to make further efforts to facilitate access and remove digital barriers for people with disabilities;

Or. it

Amendment 138
Nicola Caputo

Draft motion for a resolution
Paragraph 13

AM\1061290EN.doc 67/115 PE557.190v01-00
13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents;

13. Encourages the Commission and Member States to increase investments in the area of fixed, mobile, cable and satellite infrastructure adjusted to the future requirements for the digital, connected economy, and to adopt policies that enable the IoT and wearable technologies to flourish, such as making harmonized spectrum available for Short Range Devices, mobile and WiFi, expanding 5G technology, encouraging IPv6 deployment and addressing excessive license payments for standard-essential patents;

Or. it

Amendment 139
Michał Boni, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek, Adina-Ioana Vălean, Krišjānis Kariņš, Angelika Niebler

Draft motion for a resolution
Paragraph 13 a (new)

13 a. Believes that preserving a high-quality standardisation system can attract the best technology contributions and deliver interoperable and innovative digital services and applications;

Or. en

Amendment 140
Gunnar Hökmark

Draft motion for a resolution
Paragraph 13 a (new)
Draft motion for a resolution  

13 a. Stresses the need to allocate more spectrum, in particular the 700 MHz band, in a coordinated manner in order to secure sufficient data capacities and speeds

Or. en

Amendment 141  
Kaja Kallas, Fredrick Federley, Pavel Telička, Marietje Schaake

Draft motion for a resolution  
Paragraph 14

14. Believes that Horizon 2020's principle of "responsible innovation" should guide identifying opportunities to accelerate the market entrance of business and application opportunities;

14. Believes that Horizon 2020's principle of "responsible innovation" should guide identifying opportunities to accelerate the market entrance;

Or. en

Amendment 142  
Barbara Kappel

Draft motion for a resolution  
Paragraph 14

14. Believes that Horizon 2020's principle of "responsible innovation" should guide identifying opportunities to accelerate the market entrance of business and application opportunities;

14. Believes that in order to reap most benefits of innovation in the field of Big Data, Horizon 2020's principle of "responsible innovation" should guide identifying opportunities to accelerate the market entrance of business and application opportunities;

Or. en
Amendment 143
Krišjānis Kariņš

Draft motion for a resolution
Paragraph 14

Draft motion for a resolution
14. Believes that Horizon 2020's principle of "responsible innovation" should guide identifying opportunities to accelerate the market entrance of business and application opportunities;

Amendment
14. Believes that Horizon 2020's principle of "responsible innovation" should guide identifying opportunities to accelerate the market entrance of businesses, especially SMEs, and application opportunities;

Or. en

Amendment 144
Anne Sander

Draft motion for a resolution
Paragraph 15

Draft motion for a resolution
15. Asks the Commission to ensure a future-proof development of cloud services in Europe without prescribing business models but to let markets develop adequate solutions;

Amendment
15. Asks the Commission to ensure investment in infrastructure and a future-proof development of cloud services in Europe by encouraging markets to develop adequate solutions;

Or. fr

Amendment 145
Enrico Gasbarra

Draft motion for a resolution
Paragraph 15

Draft motion for a resolution
15. Asks the Commission to ensure a future-proof development of cloud services

Amendment
15. Asks the Commission to ensure a future-proof development of cloud services
in Europe without prescribing business models but to let markets develop adequate solutions; 

in Europe without prescribing business models but to let markets develop adequate solutions; **considers, with this in mind, that, in the context of the new European strategy on the Digital Agenda, it is necessary to plan more ambitious and complex measures relating to the cloud and overall sustainability of data traffic on the internet;**

**Or. it**

**Amendment 146**  
**Renato Soru, Patrizia Toia**

**Draft motion for a resolution**  
**Paragraph 15**

**Draft motion for a resolution**

15. Asks the Commission to ensure a future-proof development of cloud services in Europe without prescribing business models but to let markets develop adequate solutions;

**Amendment**

15. Asks the Commission to ensure a future-proof development of cloud services in Europe without prescribing business models but to let markets develop adequate solutions; **Also asks the Commission to ensure the presence of sufficient conditions for a transnational, open and efficient market;**

**Or. en**

**Amendment 147**  
**Krišjānis Kariņš**

**Draft motion for a resolution**  
**Paragraph 15**

**Draft motion for a resolution**

15. Asks the Commission to ensure a future-proof development of cloud services in Europe without prescribing business models but to let markets develop adequate solutions;

**Amendment**

15. Asks the Commission to ensure a future-proof development of cloud services in Europe without prescribing business models, but to let markets develop adequate solutions, **which would ensure**
future investments and growth for the ever evolving Big Data sector;

Amendment 148
Barbara Kappel

Draft motion for a resolution
Paragraph 15

15. Asks the Commission to ensure a future-proof development of cloud services in Europe without prescribing business models but to let markets develop adequate solutions;

15. Asks the Commission to ensure a future-proof development of cloud computing and Big Data services in Europe without prescribing business models but allowing markets develop adequate solutions to real-life consumer, business or government issues.

Amendment 149
Michał Boni, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek, Krišjānis Kariņš

Draft motion for a resolution
Paragraph 15 a (new)

15 a. Recognises that BIG DATA development, personalisation of products and services, data protection and the digital security in the broad sense are related to the problem of the access to the internet and the framework for global connectivity.
Amendment 150
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Subheading 3

Draft motion for a resolution  Amendment
Creating a Union market for Big Data  Creating a data-driven economy for the Union market

Or. en

Amendment 151
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 16

Draft motion for a resolution  Amendment
16. Welcomes that Big Data will bring deleted
more business opportunities and an increased availability of knowledge and capital;

Or. en

Amendment 152
Cornelia Ernst

Draft motion for a resolution
Paragraph 16

Draft motion for a resolution  Amendment
16. Welcomes that Big Data will bring deleted
more business opportunities and an increased availability of knowledge and capital;

Or. en
Amendment 153
Barbara Kappel

Draft motion for a resolution
Paragraph 16

16. Welcomes that Big Data will bring more business opportunities and an increased availability of knowledge and capital;

Amendment

16. Is of the opinion that Big Data has the potential to boost economic productivity, improve consumer and government services and that Big Data will bring more business opportunities and an increased availability of knowledge and capital, as long as governments and stakeholders work together in a constructive manner;

Or. en

Amendment 154
Kaja Kallas, Fredrick Federley, Philippe De Backer, Pavel Telička, Juan Carlos Girauta Vidal, Marietje Schaake

Draft motion for a resolution
Paragraph 16

16. Welcomes that Big Data will bring more business opportunities and an increased availability of knowledge and capital;

Amendment

16. Welcomes that Big Data will bring more business opportunities and an increased availability of knowledge and capital; Stresses however that the current fragmented single market is undermining the development of big data, cloud computing, the Internet of things and other data driven technologies;

Or. en

Amendment 155
David Borrelli, Dario Tamburrano
Draft motion for a resolution
Paragraph 16

Draft motion for a resolution

16. Welcomes that Big Data will bring more business opportunities and an increased availability of knowledge and capital;

Amendment

16. Welcomes that Big Data will bring more business opportunities, an increased availability of knowledge and capital and opportunities to develop forms and systems of electronic government and direct democracy;

Or. it

Amendment 156
Martina Werner

Draft motion for a resolution
Paragraph 16

Draft motion for a resolution

16. Welcomes that Big Data will bring more business opportunities and an increased availability of knowledge and capital;

Amendment

16. Welcomes that Big Data will bring more business opportunities and an increased availability of knowledge and capital; at the same time, warns that there is a tendency towards market dominance in Big Data business;

Or. de

Amendment 157
Barbara Kappel

Draft motion for a resolution
Paragraph 16 a (new)

Draft motion for a resolution

16 a. Asks for initiatives to make users of Big Data explore the possibilities of a Union market for Big Data and provide new data based business models;

Amendment

16 a. Asks for initiatives to make users of Big Data explore the possibilities of a Union market for Big Data and provide new data based business models;
Amendment 158
Evžen Tošenovský

Draft motion for a resolution
Paragraph 16 a (new)

*Draft motion for a resolution  Amendment*

16 a. Underlines the potential of data gained from European programmes such as Copernicus and Galileo;

Or. en

Amendment 159
Renato Soru, Patrizia Toia

Draft motion for a resolution
Paragraph 17

*Draft motion for a resolution  Amendment*

17. Believes that the main technological impediment for a Union market for Big Data is the lack of a common interface framework to facilitate sensor and machine data communication as well as the communication between the virtual and physical world;

17. Believes that the main impediment for a Union market for Big Data *lies in the insufficient availability of Open Data and in the lack of the market conditions for entrepreneurs to innovate and grow*;

Or. en

Amendment 160
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 17
17. Believes that the main technological impediment for a Union market for Big Data is the lack of a common interface framework to facilitate sensor and machine data communication as well as the communication between the virtual and physical world;

17. Believes that amongst the technological impediments for a data-driven Union market are the lack of interoperability and of a common interface framework to facilitate sensor and machine data communication as well as the communication between the virtual and physical world; asks the Commission to spur shared research in creating a common interface framework and promote interoperability frameworks.

Amendment 161
José Blanco López, Inmaculada Rodríguez-Piñero Fernández

Draft motion for a resolution
Paragraph 17

17. Believes the content freely generated
by the European users of internet services should be considered property of the citizens, included in the definition of Open Data, at least in their aggregated form and used by public administrations and private businesses to improve the quality of their services; furthermore asks the Commission to propose an action plan to define user generated content as Open Data when its production does not involve corresponding monetary and direct reward;

Or. en

Amendment 163
Barbara Kappel
Draft motion for a resolution
Paragraph 17 a (new)

Draft motion for a resolution

17 a. Believes that the value of Big Data can be better exploited by addressing the emerging issues of ownership and access to data concerning non-personal data in situations such as B2B, machine generated and machine-to-machine data.

Or. en

Amendment 164
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 18

Draft motion for a resolution

18. Asks the Commission to spur shared research in creating a common interface framework to reduce duplicate standards

deleted
and ensure technical and semantic interoperability to follow a market-driven standard setting process;

Amendment 165
Cornelia Ernst

Draft motion for a resolution
Paragraph 18

Draft motion for a resolution

18. Asks the Commission to spur shared research in creating a common interface framework to reduce duplicate standards and ensure technical and semantic interoperability to follow a market-driven standard setting process;

18. Asks the Commission to spur shared research in creating a common interface framework to reduce duplicate standards and ensure technical and semantic interoperability to follow a market-driven standard setting process; welcomes in this regard the Commission's efforts within ETSI and BDVA in creating a common interface framework and leading a market-driven standard setting process;

Amendment 166
Barbara Kappel

Draft motion for a resolution
Paragraph 18

Draft motion for a resolution

18. Asks the Commission to spur shared research in creating a common interface framework to reduce duplicate standards and ensure technical and semantic interoperability to follow a market-driven standard setting process;

18. Asks the Commission to spur shared research in creating a common interface framework to reduce duplicate standards and ensure technical and semantic interoperability to follow a market-driven standard setting process; welcomes in this regard the Commission's efforts within ETSI and BDVA in creating a common interface framework and leading a market-driven standard setting process;

Or. en
Paragraph 18

18. Asks the Commission to spur shared research in creating a common interface framework to reduce duplicate standards and ensure technical and semantic interoperability to follow a market-driven standard setting process;

Or. fr

Amendment

Aldo Patriciello

Paragraph 18

18. Asks the Commission to spur shared research in creating a common interface framework to reduce duplicate standards and ensure technical and semantic interoperability to follow a market-driven standard setting process;

Or. it

Amendment

Michał Boni, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek, Adina-Ioana Vălean, Krišjānis Kariņš

Paragraph 18 a (new)
18 a. Recognises that Big Data needs an enormous processing power over a huge amount of data. The requirements might be fulfilled through cloud services based architectures which provide computing power, storage and flexibility. Removing barriers in cloud services, providing legal certainty about the obligations and responsibilities of each party, guaranteeing the fulfilment of common security and data protection measures and letting the data cross borders, are crucial for the success of Big Data in Europe.

Draft motion for a resolution

Amendment

19. Asks for addressing challenges of data security, interoperability, data limitation and storage, transparent transportation rules, cross-border mechanisms, *open data exchange between administration, business, and civil society*;

Or. fr

Amendment 170
Dominique Riquet

Draft motion for a resolution
Paragraph 19

Draft motion for a resolution

19. Asks for addressing challenges of data security, interoperability, data limitation and storage, transparent transportation rules, and cross-border mechanisms;

Or. en

Amendment 171
Barbara Kappel

Draft motion for a resolution
Paragraph 19
Draft motion for a resolution

19. Asks for addressing challenges of data security, interoperability, data limitation and storage, transparent transportation rules, cross-border mechanisms, open data exchange between administration, business, and civil society;

Amendment

19. Asks for addressing challenges of data security, interoperability, data limitation and storage, transparent transportation rules, cross-border mechanisms, and, where applicable, exchange of open data between administration, business, and civil society; in that context, asks for a balanced approach that upholds Europe's high standards in data protection while facilitating a secure re-use of data as a critical part in the process of unleashing Big Data based innovations in order to exploit the full potential of Big Data.

Or. en

Amendment 172
David Borrelli, Dario Tamburrano

Draft motion for a resolution
Paragraph 19

Draft motion for a resolution

19. Asks for addressing challenges of data security, interoperability, data limitation and storage, transparent transportation rules, cross-border mechanisms, open data exchange between administration, business, and civil society;

Amendment

19. Asks for addressing challenges of data ownership, possession, management and security, as well as data interoperability, limitation and storage, transparent transportation rules, cross-border mechanisms, open data exchange between administration, business, and civil society;

Or. it

Amendment 173
Kaja Kallas, Fredrick Federley, Philippe De Backer, Pavel Telička, Juan Carlos Girauta Vidal, Marietje Schaake

Draft motion for a resolution
Paragraph 19
19. Asks for addressing challenges of data security, interoperability, data limitation and storage, transparent transportation rules, cross-border mechanisms, open data exchange between administration, business, and civil society;

19. Welcome the announcement of a European 'Free flow of data' initiative which needs to remove existing barriers to the single market for data; Asks for this initiative to address challenges of data security, interoperability, data ownership, limitation and storage, restrictions to the use and reuse of data across Europe, transparent transportation rules, cross-border mechanisms, open data exchange between administration, business, and civil society;

Amendment 174
Renato Soru, Patrizia Toia

Draft motion for a resolution
Paragraph 19

19. Asks for addressing challenges of data security, interoperability, data limitation and storage, transparent transportation rules, cross-border mechanisms, open data exchange between administration, business, and civil society;

19. Asks for addressing challenges of data security, interoperability, data limitation and storage, transparent transportation rules, cross-border mechanisms, open data diffusion and availability for Public administrations and service providers, business, and civil society;

Amendment 175
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 19
Draft motion for a resolution

19. Asks for addressing challenges of data security, interoperability, data limitation and storage, transparent transportation rules, cross-border mechanisms, open data exchange between administration, business, and civil society;

Amendment

19. Asks for addressing challenges of data security, interoperability, data limitation and storage, transparent transportation rules, cross-border mechanisms, open access and data exchange in administration, business, and civil society;

Or. en

Amendment 176
Herbert Reul

Draft motion for a resolution
Paragraph 19

Draft motion for a resolution

19. Asks for addressing challenges of data security, interoperability, data limitation and storage, transparent transportation rules, cross-border mechanisms, open data exchange between administration, business, and civil society;

Amendment

19. Asks for addressing challenges of data security, interoperability, data limitation and storage, transparent transportation rules, cross-border mechanisms, data exchange between administration, business, and civil society;

Or. de

Amendment 177
Miapetra Kumpula-Natri

Draft motion for a resolution
Paragraph 19

Draft motion for a resolution

19. Asks for addressing challenges of data security, interoperability, data limitation and storage, transparent transportation rules, cross-border mechanisms, open data exchange between administration, business, and civil society;

Amendment

19. Asks for addressing challenges of data security, interoperability, data limitation and storage, transparent transportation rules, cross-border mechanisms, open data exchange between administration, business, and civil society to enable secure use of open data even for public services;
Amendment 178
Michał Boni, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek, Adina-Ioana Vălean, Krišjānis Kariņš

Draft motion for a resolution
Paragraph 19 a (new)

19 a. Believes that the security and data protection are fundamental basis for data-driven industry growth. Finding synergy of big data, data protection, security of data and open data is basic for the new digital start in Europe. Better regulation in privacy must fight against such behaviours that affect the trust in the whole Big Data ecosystem;

Amendment 179
Kaja Kallas, Fredrick Federley, Philippe De Backer, Pavel Telička, Juan Carlos Girauta Vidal, Marietje Schaake

Draft motion for a resolution
Paragraph 19 a (new)

19 a. Believes that trust in digital solutions, through in particular the security of IT systems and encrypted communication, is vital to innovation and growth in the data driven economy;

Amendment 180
Barbara Kappel
Draft motion for a resolution
Paragraph 20

20. Asks for a future-proof regulatory
environment that reflects the changing
nature of the market is technology-neutral
and creates a level playing field while
avoiding excessive regulatory burden;

Amendment

20. Asks for a future-proof regulatory
environment that reflects the changing
nature of the market is technology-neutral
and creates a level playing field while
avoiding excessive regulatory burden;

believes that regulation should set clear
requirements to ensure data protection
and data safety but should not inhibit the
development of the Big Data market;

notes that market-driven voluntary
guidelines constitute a constructive
approach to Big Data issues; believes that
a level-playing field should be the place
where all operators, small and big, are
enabled to invest, innovate and compete
for the benefits of European end-users in
terms of choice and affordability; stresses
however that enduring bottlenecks in
networks infrastructures such as the last
mile remain an obstacle to investments by
smaller operators.

Or. en

Amendment 181
Renato Soru, Patrizia Toia

Draft motion for a resolution
Paragraph 20

20. Asks for a future-proof regulatory
environment that reflects the changing
nature of the market is technology-neutral
and creates a level playing field while
avoiding excessive regulatory burden;

Amendment

20. Asks for a future-proof regulatory
environment, fitted with sufficient
flexibility to adapt to the changing nature
of the sector, technology-neutral and
supporting a level playing field;

furthermore, creating market conditions
for European businesses to compete
within and outside the EU while avoiding
excessive regulatory burden and addressing the needs of the end users;

Amendment 182
David Borrelli, Dario Tamburrano

Draft motion for a resolution
Paragraph 20

Draft motion for a resolution
20. Asks for a future-proof regulatory environment that reflects the changing nature of the market is technology-neutral and creates a level playing field while avoiding excessive regulatory burden;

Amendment
20. Asks for a future-proof regulatory environment that reflects the changing nature of the market, is technology-neutral, encourages the creation of start-ups and entry to the market by new operators, creating a level playing field and fair competition while avoiding excessive regulatory burden and ensuring full compliance with data protection and privacy standards; welcomes, in this context, the Commission’s plans for reviewing the ePrivacy Directive;

Or. it

Amendment 183
Michał Boni, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek, Krišjānis Kariņš

Draft motion for a resolution
Paragraph 20

Draft motion for a resolution
20. Asks for a future-proof regulatory environment that reflects the changing nature of the market is technology-neutral and creates a level playing field while avoiding excessive regulatory burden;

Amendment
20. Asks for a future-proof regulatory environment that reflects the changing nature of the market is technology-neutral and creates the Digital Single Market while avoiding excessive regulatory burden;
Amendment 184
Michał Boni, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek

Draft motion for a resolution
Paragraph 20 a (new)

Draft motion for a resolution

20 a. Ask the Commission for a common and coherent EU-wide regulatory approach like cloud, avoiding national limitations and providing legal certainty under a common framework, common consumer protection rules, uniform security requirements, data protection and supervisory activity, favourable public-private partnership framework, etc. In all these issues, it is especially relevant to have a common approach, at least across Europe, to foster a sustainable single market for Big Data that fully benefits from economies of scale. This also favours the promotion of EU standards internationally in order to promote more interoperability within the regulatory frameworks affecting these services across the different regions.

Amendment 185
Barbara Kappel

Draft motion for a resolution
Paragraph 20 a (new)

Draft motion for a resolution

20 a. Asks the Commission in defining a Big Data Value Market to clearly distinguish between open, public, private data of individuals and company-owned...
data and devise technological solutions that are privacy enhancing "by design", such as user controlled cloud based technologies for storage and use of personal data.

Amendment 186
Clare Moody, Jude Kirton-Darling, Theresa Griffin

Draft motion for a resolution
Paragraph 20 a (new)

Draft motion for a resolution

Amendment

20 a. Recognises the value of the Internet of Things (IoT) and Smart Grids for achieving an Energy Union, and calls on the Commission to coordinate the framework for a Digital Single Market with the framework for Energy Union and the existing Europe 2020 targets;

Amendment 187
Barbara Kappel

Draft motion for a resolution
Paragraph 20 b (new)

Draft motion for a resolution

Amendment

20 b. Believes that facilitating the uptake of Big Data technologies, including Text and Data Mining will be an important factor in deriving added value from open datasets.

Or. en
Amendment 188
Michał Boni, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek, Adina-Ioana Vălean

Draft motion for a resolution
Paragraph 20 b (new)

Draft motion for a resolution  Amendment

20 b. Stresses that importance of "Free flow of data" and welcome the future initiative of the European Commission in this regard;

Or. en

Amendment 189
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Subheading 4

Draft motion for a resolution  Amendment

Fostering start-ups, *SMEs and mid-caps on Big Data*  Fostering start-ups *and SMEs*

Or. en

Amendment 190
David Borrelli, Dario Tamburrano

Draft motion for a resolution
Subheading 4

Draft motion for a resolution  Amendment

Fostering start-ups, SMEs *and mid-caps on Big Data*  Fostering start-ups *and SMEs on Big Data*

Or. it
Amendment 191
Renato Soru, Patrizia Toia

Draft motion for a resolution
Paragraph 21

Draft motion for a resolution

21. Recognizes the need for proactive service providers to promote the benefits of Big Data and foster trust of Big Data related technologies among SMEs; asks to set up a service interface helping SMEs to better use their own and public data;

Amendment

21. Recognizes the need for the development of a strong base of service providers in the field of Big Data; Furthermore recognizes the need to support the widespread application of Big Data services to improve efficiency in different economic sectors and to support new service providers capable of competing internationally;

Or. en

Amendment 192
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 21

Draft motion for a resolution

21. Recognizes the need for proactive service providers to promote the benefits of Big Data and foster trust of Big Data related technologies among SMEs; asks to set up a service interface helping SMEs to better use their own and public data;

Amendment

21. Recognizes the need for proactive service providers to promote the knowledge about a data driven economy and the benefits to the development of society.

Or. en

Amendment 193
David Borrelli, Dario Tamburrano

Draft motion for a resolution
Paragraph 21
21. Recognizes the need for proactive service providers to promote the benefits of Big Data and foster trust of Big Data related technologies among SMEs; asks to set up a service interface helping SMEs to better use their own and public data;

21. Recognizes the need for service providers to raise SMEs’ awareness of the advantages of the integrated use of data and foster trust of technologies which exploit it; asks to set up a service interface helping SMEs to better use their own and public data;

Or. it

Amendment 194
Cornelia Ernst

Draft motion for a resolution Paragraph 21

21. Recognizes the need for proactive service providers to promote the benefits of Big Data and foster trust of Big Data related technologies among SMEs; asks to set up a service interface helping SMEs to better use their own and public data;

21. Recognizes the need for proactive service providers to promote the benefits of Big Data and foster trust of Big Data related technologies among SMEs; asks to set up a service interface helping SMEs to better use their own and public data while strictly adhering to EU laws on data protection;

Or. en

Amendment 195
Anne Sander

Draft motion for a resolution Paragraph 21

21. Recognizes the need for proactive service providers to promote the benefits of Big Data and foster trust of Big Data related technologies among SMEs; asks to set up a service interface helping SMEs to better use their own and public data while strictly adhering to EU laws on data protection;

21. Recognizes the need for proactive service providers and public authorities to promote the benefits of Big Data and foster trust of Big Data related technologies among SMEs; asks to set up a service interface helping SMEs to better use their own and public data while strictly adhering to EU laws on data protection;
set up a service interface helping SMEs to better **use** their own and public data; among SMEs; asks to set up a service interface helping SMEs to better **use** their own and public data;

Amendment 196
Michał Boni, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek, Adina-Ioana Vălean, Krišjānis Kariņš

Draft motion for a resolution
Paragraph 21

*Draft motion for a resolution*  

21. Recognizes the need for proactive service providers to promote the benefits of Big Data and foster trust of Big Data related technologies among SMEs; asks to set up a service interface helping SMEs to better use their own and public data;

*Amendment*

21. Recognizes the need for proactive service providers to promote the benefits and assets of Big Data and foster trust of Big Data related technologies among SMEs; asks to set up a service interface helping SMEs to better use their own and public data;

Or. en

Amendment 197
Kaja Kallas, Fredrick Federley, Philippe De Backer, Pavel Telička, Juan Carlos Girauta Vidal, Marietje Schaake

Draft motion for a resolution
Paragraph 21 a (new)

*Draft motion for a resolution*  

21 a. Recalls that only 1.7% companies make full use of advanced digital technologies despite the benefits digital tools can bring across all economic sectors; urges the European Commission and Member states to launch a digital entrepreneurship strategy, that includes the use of big data and other data technologies by entrepreneurs, SMEs and innovative companies;

*Amendment*

21 a. Recalls that only 1.7% companies make full use of advanced digital technologies despite the benefits digital tools can bring across all economic sectors; urges the European Commission and Member states to launch a digital entrepreneurship strategy, that includes the use of big data and other data technologies by entrepreneurs, SMEs and innovative companies;
Amendment 198
Barbara Kappel

Draft motion for a resolution
Paragraph 21 a (new)

21 a. Supports the development of an ecosystem encompassing start-ups, SMEs, larger companies and multinationals, as well as researchers and the broader community and fostering the creation of European Big Data hubs.

Amendment 199
Barbara Kappel

Draft motion for a resolution
Paragraph 21 b (new)

21 b. Believes it is necessary to raise awareness about the benefits of Big Data and for that aim to provide a nurturing environment for European software-providers, in particular to SMEs and mid-caps, as well as to foster the development of decentralized cloud facilities.

Amendment 200
Barbara Kappel

Draft motion for a resolution
Paragraph 21 c (new)
Draft motion for a resolution

21 c. Believes that a full and open access to government and public research data is a precondition for creative data innovation and experimentation and a major step in lowering market entry barriers for start-ups and SMEs.

Amendment

Draft motion for a resolution

22. Deplores the fact that many start-up ideas and SME opportunities are being lost or realized outside of Europe due to a lack of capital, technology and inclusion in research activity by existing players; asks to facilitate services that help with acquiring venture capital by bringing together institutions providing technology and infrastructure with start-ups providing application ideas;

Amendment

22. Deplores the fact that many start-up ideas and SME opportunities are being lost or realized outside of Europe due to a lack of capital, technology and inclusion in research activity by existing players;

Amendment

Draft motion for a resolution

22. Deplores the fact that many start-up ideas and SME opportunities are being lost or realized outside of Europe due to a lack of capital, technology and inclusion in research activity by existing players; asks to facilitate services that help with acquiring venture capital by bringing together institutions providing technology and infrastructure with start-ups providing application ideas;

Or. en
or realized outside of Europe due to a lack of capital, technology and inclusion in research activity by existing players; asks to facilitate services that help with acquiring venture capital by bringing together institutions providing technology and infrastructure with start-ups providing application ideas;

realized outside of Europe due to a lack of capital, technology and inclusion in research and market entry activities by existing players as well as a lack of meaningful intellectual property rights protection; asks to further facilitate access to venture capital, also by providing the right incentives, including tackling the challenges presented by the different national, administrative, regulatory and tax rules; notes the already existing initiatives by Member States and the private sector facilitating access to venture capital and bringing together institutions providing technology and infrastructure with start-ups providing application ideas;

Amendment 203
Kaja Kallas, Fredrick Federley, Philippe De Backer, Pavel Telička, Marietje Schaake

Draft motion for a resolution
Paragraph 22

Draft motion for a resolution

22. Deplores the fact that many start-up ideas and SME opportunities are being lost or realized outside of Europe due to a lack of capital, technology and inclusion in research activity by existing players; asks to facilitate services that help with acquiring venture capital by bringing together institutions providing technology and infrastructure with start-ups providing application ideas;

Amendment

22. Deplores the fact that many start-up ideas and SME opportunities are being lost or realized outside of Europe due to many barriers such as administrative burdens and access to finance; Asks to facilitate services that help with acquiring venture capital, by bringing together institutions providing technology and infrastructure with start-ups providing application ideas;

Amendment 204
Philippe De Backer
Draft motion for a resolution
Paragraph 22

22. Deplores the fact that many start-up ideas and SME opportunities are being lost or realized outside of Europe due to a lack of capital, technology and inclusion in research activity by existing players; asks to facilitate services that help with acquiring venture capital by bringing together institutions providing technology and infrastructure with start-ups providing application ideas;

Amendment

22. Deplores the fact that many start-up ideas and SME opportunities are being lost or realized outside of Europe due to scalability issues driven by a lack of capital, technology and inclusion in research activity by existing players; asks to facilitate attracting investment both from inside and outside of Europe, such as venture capital; Calls for stimulating the development of ecosystems, bringing together public and private institutions providing technology and infrastructure with start-ups providing application ideas;

Or. en

Amendment 205
Michał Boni, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek

Draft motion for a resolution
Paragraph 22

22. Deplores the fact that many start-up ideas and SME opportunities are being lost or realized outside of Europe due to a lack of capital, technology and inclusion in research activity by existing players; asks to facilitate services that help with acquiring venture capital by bringing together institutions providing technology and infrastructure with start-ups providing application ideas;

Amendment

22. Regrets the fact that many start-up ideas and SME opportunities are being lost or realized outside of Europe due to a lack of capital and financing and inclusion in research activity by existing players; asks to facilitate services that help with acquiring venture capital by bringing together institutions providing technology and infrastructure with start-ups providing application ideas;

Or. en

Amendment 206
Evžen Tošenovský
Draft motion for a resolution
Paragraph 22

Draft motion for a resolution

22. Deplores the fact that many start-up ideas and SME opportunities are being lost or realized outside of Europe due to a lack of capital, technology and inclusion in research activity by existing players; asks to facilitate services that help with acquiring venture capital by bringing together institutions providing technology and infrastructure with start-ups providing application ideas;

Amendment

22. Deplores the fact that many start-up ideas and SME opportunities are being lost or realized outside of Europe due to a lack of capital, technology and inclusion in research activity by existing players which negatively affects the competitiveness of Europe; asks to facilitate services that help with acquiring venture capital by bringing together institutions providing technology and infrastructure with start-ups providing application ideas;

Or. en

Amendment 207
Anne Sander

Draft motion for a resolution
Paragraph 23

Draft motion for a resolution

23. Calls on the Commission and Member States to promote the establishment of Innovation Spaces and clusters to help developing skills and creating a competitive advantage in intellectual capital;

Amendment

23. Calls on the Commission and Member States to promote the establishment of Innovation Spaces and clusters to help developing skills and creating a competitive advantage in intellectual capital; calls for closer partnerships to be established between businesses and universities and research centres in order to foster Big Data innovation;

Or. fr

Amendment 208
Cornelia Ernst
Draft motion for a resolution
Paragraph 23

Draft motion for a resolution

23. Calls on the Commission and Member States to promote the establishment of Innovation Spaces and clusters to help developing skills and creating a competitive advantage in intellectual capital;

Amendment

23. Calls on the Commission and Member States to promote the establishment of Innovation Spaces and clusters to help developing skills and creating a competitive advantage in intellectual capital and also better understand the perspectives and limitations of big data technology;

Or. en

Amendment 209
David Borrelli, Dario Tamburrano

Draft motion for a resolution
Paragraph 23a (new)

Draft motion for a resolution

23a. Stresses the importance of improving media and digital literacy and, on this subject, urges Member States to supplement the objectives stated in the Digital Agenda for Europe by 2020, in order to bridge the widening gulf between European citizens and to avert the anticipated shortage of ICT professionals;

Amendment

Or. it

Amendment 210
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 24
Draft motion for a resolution

24. Supports the investment in initiatives such as the Grand Coalition for Digital Jobs and the European e-Skills Week;

Amendment

deleted

Or. en

Amendment 211
Cornelia Ernst

Draft motion for a resolution
Paragraph 24

Draft motion for a resolution

24. Supports the investment in initiatives such as the Grand Coalition for Digital Jobs and the European e-Skills Week;

Amendment

deleted

Or. en

Amendment 212
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 25

Draft motion for a resolution

25. Demands that EU and Member States should step up their coordinated efforts to make Big Data an attractive vocational field;

Amendment

25. Demands that EU and Member States should step up their coordinated efforts to make ICT an attractive vocational field and support the founding of new startups in this field, thus creating more employment opportunities;

Or. en
Draft motion for a resolution
Paragraph 25

25. Demands that EU and Member States should step up their coordinated efforts to make Big Data an attractive vocational field;

Amendment
25. Demands that EU and Member States should step up their coordinated efforts to make Big Data an attractive vocational field; believes that such efforts should include measures to facilitate entering into Big Data entrepreneurship.

Or. en

Draft motion for a resolution
Paragraph 25

25. Demands that EU and Member States should step up their coordinated efforts to make Big Data an attractive vocational field;

Amendment
25. Demands that EU and Member States should step up their coordinated efforts to make Big Data an attractive vocational field, especially for women who are traditionally under-represented in this area;

Or. en

Draft motion for a resolution
Paragraph 25

25. Demands that EU and Member States should step up their coordinated efforts to make Big Data an attractive vocational field;

Amendment
25. Demands that EU and Member States should step up their coordinated efforts to make Big Data an attractive vocational field.
make Big Data an attractive vocational field; points to the importance of adopting a multidisciplinary approach to the training of professionals and team-building;

Or. es

Amendment 216
Krišjānis Kariņš

Draft motion for a resolution
Paragraph 25

Draft motion for a resolution

25. **Demands** that EU and Member States should step up their coordinated efforts to make Big Data an attractive vocational field;

Amendment

25. **Asks** that EU and Member States should improve their coordinated efforts to make Big Data an attractive vocational field;

Or. en

Amendment 217
David Borrelli, Dario Tamburrano

Draft motion for a resolution
Paragraph 25

Draft motion for a resolution

25. Demands that EU and Member States should step up their coordinated efforts to make **Big Data** an attractive vocational field;

Amendment

25. Demands that EU and Member States should step up their coordinated efforts to make **ICT** an attractive vocational field;

Or. it

Amendment 218
Barbara Kappel

Draft motion for a resolution
Paragraph 25 a (new)
25 a. Stresses the need to promote the movement of skilled workers across the EU; calls on the Commission to propose measures to address skills shortages, including specific measures to attract talent.

Amendment 219
David Borrelli, Dario Tamburrano

Draft motion for a resolution
Paragraph 26

26. Asks for initiatives that foster lifelong learning and tailored measures for elderly people and facilitate the access to education for professionals to widen their skills in Big Data.

Amendment

26. Asks for initiatives that facilitate the access to education for professionals to widen their skills in ICT and data processing; stresses the importance of promoting lifelong learning and tailored measures for elderly people;

Amendment 220
Anne Sander

Draft motion for a resolution
Paragraph 26

26. Asks for initiatives that foster lifelong learning and tailored measures for elderly people and facilitate the access to education for professionals to widen their skills in Big Data.

Amendment

26. Asks for initiatives that foster lifelong learning and tailored measures for elderly people and facilitate the access to education for professionals to widen their skills in Big Data; calls for the digital transformation of business to be given a greater place in continuing education and
for e-leadership programmes to be drawn up for company managers and senior civil servants;

Amendment 221
Krišjānis Kariņš

Draft motion for a resolution
Paragraph 26

Draft motion for a resolution

26. Asks for initiatives that foster lifelong learning and tailored measures for elderly people and facilitate the access to education for professionals to widen their skills in Big Data.

Amendment

26. Asks for initiatives that foster lifelong learning and tailored measures for elderly people and facilitate the access to education for professionals to widen their skills in Big Data and increase the number of digitally skilled professionals;

Or. en

Amendment 222
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 26

Draft motion for a resolution

26. Asks for initiatives that foster lifelong learning and tailored measures for elderly people and facilitate the access to education for professionals to widen their skills in Big Data.

Amendment

26. Asks for initiatives that foster lifelong learning and tailored measures for elderly people and facilitate the access to education for professionals to widen their skills in ICT.

Or. en

Amendment 223
Cornelia Ernst

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Draft motion for a resolution
Paragraph 26

Draft motion for a resolution
26. Asks for initiatives that foster lifelong learning and tailored measures for elderly people and facilitate the access to education for professionals to widen their skills in Big Data.

Amendment
26. Asks for initiatives that foster lifelong learning and tailored measures, **not only** for elderly people **but everybody**, and facilitate the access to education for professionals to widen their skills in Big Data.

Or. en

Amendment 224
Mia Petra Kumpula-Natri

Draft motion for a resolution
Paragraph 26

Draft motion for a resolution
26. Asks for initiatives that foster lifelong learning and tailored measures for elderly people and facilitate the access to education for professionals to widen their skills in Big Data;

Amendment
26. Asks for initiatives **to be launched and funding models to be recommended** that foster lifelong learning and tailored measures for elderly people and facilitate the access to education for professionals to widen their skills in Big Data;

Or. fi

Amendment 225
Clare Moody, Mary Honeyball, Julie Ward

Draft motion for a resolution
Paragraph 27

Draft motion for a resolution
27. Supports initiatives to include coding related subjects in national curricula;

Amendment
27. Supports initiatives to include coding related subjects in national curricula, **and calls for particular focus to be paid to ensure these new curricula teach in a way that motivates girls to participate in this**
sector, in order to address the gender imbalance in computer sciences and coding;

Amendment 226
Cornelia Ernst

Draft motion for a resolution
Paragraph 27

Draft motion for a resolution
27. Supports initiatives to include coding related subjects in national curricula;

Amendment
27. Supports initiatives to include coding related subjects in national curricula;

stresses the multiple advantages of free software in education.

Amendment 227
Barbara Kappel

Draft motion for a resolution
Paragraph 27

Draft motion for a resolution
27. Supports initiatives to include coding related subjects in national curricula;

Amendment
27. Supports initiatives to include coding and subjects related to data handling in national curricula;

Amendment 228
Evžen Tošenovský

Draft motion for a resolution
Paragraph 27 a (new)
Draft motion for a resolution

27 a. Reminds that EU and Member States should step up their effort to prevent brain-drain of high-educated and skilled experts to other regions outside Europe;

Or. en

Amendment 229
Philippe De Backer

Draft motion for a resolution
Paragraph 28 a (new)

Draft motion for a resolution

28 a. Stresses the need for developing a more entrepreneurial mindset in Europe;

Or. en

Amendment 230
Cornelia Ernst

Draft motion for a resolution
Paragraph 29

Draft motion for a resolution

29. Asks for initiatives to increase awareness of the benefits and the value that Big Data offers for society;

deleted

Or. en

Amendment 231
Gianluca Buonanno
Draft motion for a resolution
Paragraph 29

Draft motion for a resolution

29. Asks for initiatives to increase awareness of the benefits and the value that Big Data offers for society;

Amendment

29. Asks for initiatives to increase awareness of the benefits and the value that Big Data offers for society, and of the instruments to protect privacy, copyright and data collection which are provided for by the legal orders of the Member States;

Or. it

Amendment 232
Martina Werner

Draft motion for a resolution
Paragraph 29

Draft motion for a resolution

29. Asks for initiatives to increase awareness of the benefits and the value that Big Data offers for society;

Amendment

29. Asks for initiatives to launch a public debate on the benefits and the value of Big Data on the one hand and the associated risks on the other;

Or. de

Amendment 233
Aldo Patriciello

Draft motion for a resolution
Paragraph 29

Draft motion for a resolution

29. Asks for initiatives to increase awareness of the benefits and the value that Big Data offers for society;

Amendment

29. Asks for initiatives to increase awareness of the benefits and the value that Big Data offers for society, particularly in relation to those groups that do not yet have access to digital technologies or are not very familiar with them;
29. Asks for initiatives to increase awareness of the benefits and the value that Big Data offers for society; 29. Asks for initiatives to increase awareness of the benefits and the value that Big Data offers for society and to work towards a clearer profile of the social benefits Big Data can provide;

Draft motion for a resolution
Paragraph 29

29. Asks for initiatives to increase awareness of the benefits and the value that Big Data offers for society;

29. Asks for initiatives to empower citizens on the use and value of their data, in particular for the development of new innovative services, and to increase awareness of the benefits and the value that Big Data offers for society;

Draft motion for a resolution
Paragraph 29

29. Asks for initiatives to increase awareness of the benefits and the value that Big Data offers for society;
Draft motion for a resolution

29. Asks for initiatives to increase awareness of the benefits and the value that **Big Data** offers for society;

29. Asks for initiatives to increase awareness of the benefits and the value that **digital economy** offers for society;

Or. en

Amendment 237
Martina Werner

Draft motion for a resolution
Paragraph 29 a (new)

Draft motion for a resolution

29a. Observes that data which are not personal could also facilitate monitoring of performance or conduct; calls on the Commission, therefore, to investigate possible effects of Big Data on employees and, in all initiatives concerning Big Data, to preserve the rights of employees and fully involve their representatives;

Or. de

Amendment 238
Barbara Kappel

Draft motion for a resolution
Paragraph 29 a (new)

Draft motion for a resolution

29 a. Sees Big Data's value in society in its effects on e-government, public administration and policy making that is better informed and based on a sounder rationale and which could bring 150 to 300 billion Euro of added value according to OECD's report "Exploring Data-Driven Innovation as a New Source of Growth - mapping the policy issues raised
by 'Big Data'".

Or. en

Amendment 239
Gianluca Buonanno

Draft motion for a resolution
Paragraph 29 a (new)

Draft motion for a resolution  Amendment

29a. Calls on the Member States to ensure that instruments to protect privacy, copyright and data collection which are provided for by their respective legal orders are adequate to the new challenges presented by rapid developments in the use of Big Data;

Or. it

Amendment 240
Michał Boni, Antonio Tajani, Pilar del Castillo Vera, Gunnar Hökmark, Jerzy Buzek, Adina Ioana Vălean

Draft motion for a resolution
Paragraph 29 a (new)

Draft motion for a resolution  Amendment

29 a. Supports a strong cooperation between the contributors to the data-driven economy, the leaders in that area - and the science and research sector in order to create tangible benefits for governments, businesses and citizens;

Or. en

Amendment 241
David Borrelli, Dario Tamburrano
Draft motion for a resolution
Paragraph 29 a (new)

Draft motion for a resolution
29a. Calls on the Commission to assess the possibility of adopting a code of ethics for the integrated use of data which establishes the principles and best practices that should guide the activities of governments, undertakings and users in general;

Or. it

Amendment 242
David Borrelli, Dario Tamburrano

Draft motion for a resolution
Paragraph 30

Draft motion for a resolution
30. Welcomes the opportunities brought about by Big Data to increase popular participation and involvement such as in the form of e-democracy;

Amendment
30. Welcomes the opportunities brought about by digital infrastructure and the integrated use of data to increase popular participation and involvement by means of forms of direct democracy and e-democracy; stresses, in this context, the need to ensure interoperability and mutual recognition of digital signatures at European Union and Member State level;

Or. it

Amendment 243
Michel Reimon
on behalf of the Verts/ALE Group

Draft motion for a resolution
Paragraph 30
30. Welcomes the opportunities brought about by **Big Data** to increase popular participation and involvement such as in the form of e-democracy;

30. Welcomes the opportunities brought about by **the digital infrastructure** to increase popular participation and involvement such as in the form of e-democracy;

**Amendment**

**Draft motion for a resolution**

**Paragraph 31**

31. Points out that **data analysis** increase the benefits of Open Government Data by increasing the quality of government services, reinforcing evidence-based policy making and leading to substantial efficiency savings;

31. Points out that **Big Data analytics** increase the benefits of Open Government Data by increasing the quality of government services, strengthening democracy, driving economic opportunity, improving citizens' quality of life, reinforcing evidence-based policy and decision making, and leads to substantial efficiency savings by improving performance management and to substantial government savings by using data analytics in fraud detection scenarios.

**Amendment**

**Draft motion for a resolution**

**Paragraph 31**

31. Points out that data analysis increase

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**Amendment**

**Draft motion for a resolution**

**Paragraph 31**

31. Points out that data analysis increase

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the benefits of Open Government Data by increasing the quality of government services, reinforcing evidence-based policy making and leading to substantial efficiency savings;
Amendment 248
David Borrelli, Dario Tamburrano

Draft motion for a resolution
Paragraph 31 a (new)

Draft motion for a resolution

31a. Stresses the need also to fully exploit the advantages of the shared economy and the open and inclusive involvement of civil society and citizens;

Amendment

Or. it

Amendment 249
Kaja Kallas, Juan Carlos Girauta Vidal, Marietje Schaake, Philippe De Backer, Fredrick Federley, Pavel Telička

Draft motion for a resolution
Paragraph 31 a (new)

Draft motion for a resolution

31 a. Calls on the European Commission to foster discussions at international level on big data and other data-driven technologies given the global dimension of the information society;

Amendment

Or. en