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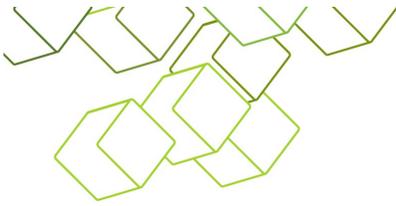


Criteria for adopting open source software in Public Administrations



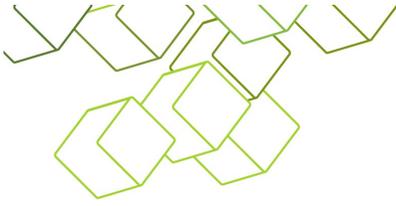
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Title:

Criteria for adopting open source software in Public Administrations

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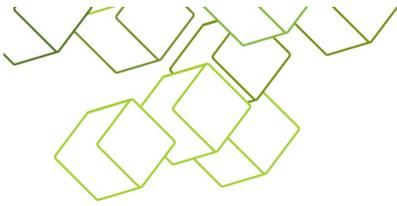
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1 OBJECTIVES

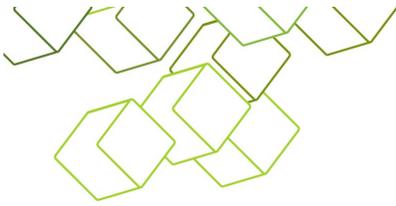
The purpose of this dossier is to analyse the most important criteria taken into account by the public administrations of thirty countries when adopting or choosing open source software, within the limitations inherent in this type of study.

It is also intended to be a valuable contribution to the future of the open source software sector, due mainly to the fact that it is the result of collaboration between members of many public administrations worldwide. IT professionals from four continents have collaborated with the CENATIC observatory, and their opinions and suggestions have served as the basis for the conclusions set out in this dossier.

The first stage of the study, a review of the literature published by CENATIC observatory, has identified eight different main criteria taken into account by public administrations when choosing to use open source software.

- Open standards and open development process
- Vendor independence and flexibility.. Domestic economy.
- Low total cost of ownership
- Availability of applications
- Best-of-breed solutions
- Faster procurement
- Access to source code
- Political decisions and initiatives

CENATIC has created an evaluation sheet based on these 8 main criteria that takes into account the weight assigned to each of them, based on the opinions of the participants. The weight given to each criterion ranges from 1 to 8, with 1 representing the least importance and 8 the greatest importance.



Country:

Reasons	Ranking Mark
<u>Open standards and Open development process</u>	1
<u>Vendor independence and flexibility.</u>	1
<u>Lower total cost of ownership</u>	2
<u>Availability of applications</u>	3
<u>Best-of-breed solutions</u>	4
<u>Faster procurement</u>	5
<u>Access to source code</u>	6
<u>Political decision/pressure</u>	7
	8
<u>Comments</u>	Not Applicable

Figure 1: Evaluation sheet. Source: ONSFA. 2011

Data was collected by means of an evaluation sheet sent to related professionals of the public administration in the participating countries. The objective was to obtain first-hand information on the criteria considered when adopting open source software, based on the opinions of these professionals.

The adoption criteria for open source software are quite different and are used for different purposes depending on the country. These criteria, identified by CENATIC for use by the public administrations when making decisions to adopt open source software and the obtained results, are described in more detail below.

2 RESULTS

This analysis identifies the most important criteria taken into account when deciding whether or not to adopt open source software in the different geographical areas for use by the Public Administration. In terms of the criteria for adopting open source software, the dossier concludes that the administrations are influenced by criteria such as TCO, with criteria such as vendor independence and flexibility, open standards and open development process being particularly important. However, the public administrations are less easily persuaded by criteria such as faster procurement, Best-of-breed solutions and political decisions and initiatives.

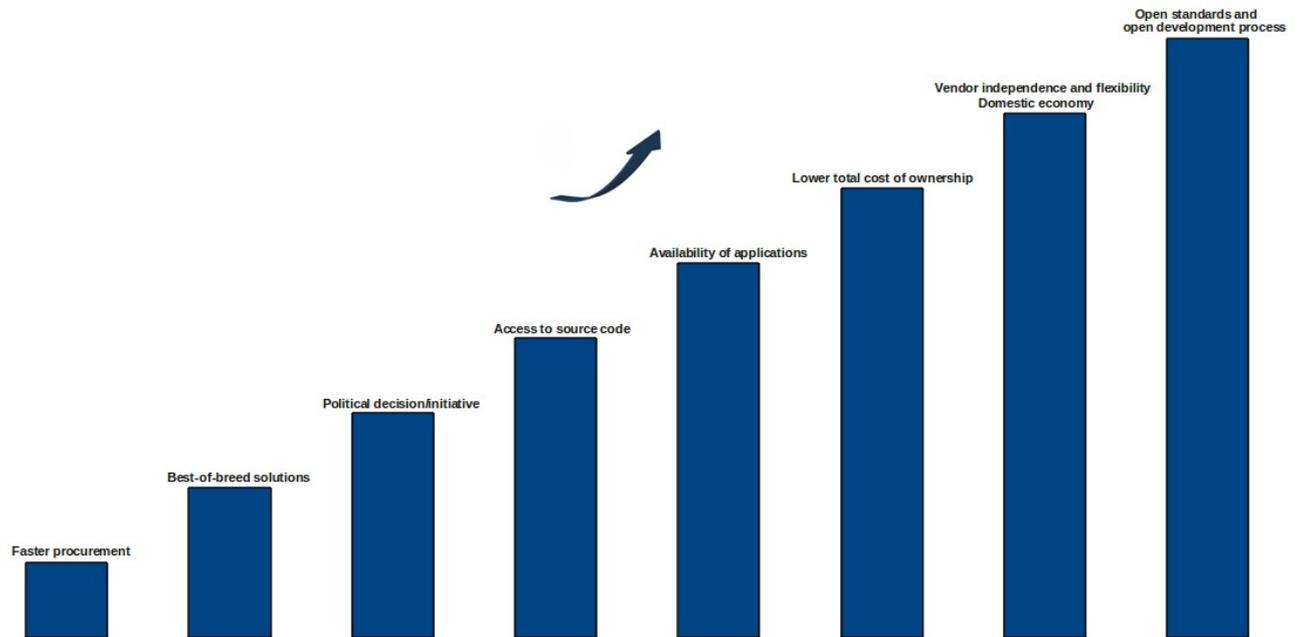
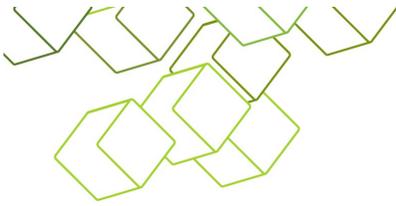


Figure 2: Overview of the situation. Source: ONSFA. 2011

2.1 Open standards and Open development process

Generally speaking, open source software products usually follow open public guidelines and specifications. The use of open standards favours systems interoperability of, as well as the development of new services and content. These are essential considerations when implementing e-Administration, and particularly when ensuring that the services provided are accessible to everyone. In this regard, the use of open standards ensures the participation of the different parties involved in these administrations, promoting an open software development model.

Considering only each country's score for "Open standards and Open development process," we can see that 57% of the countries consider this criterion to be very important and important. Spain forms part of this group of countries.

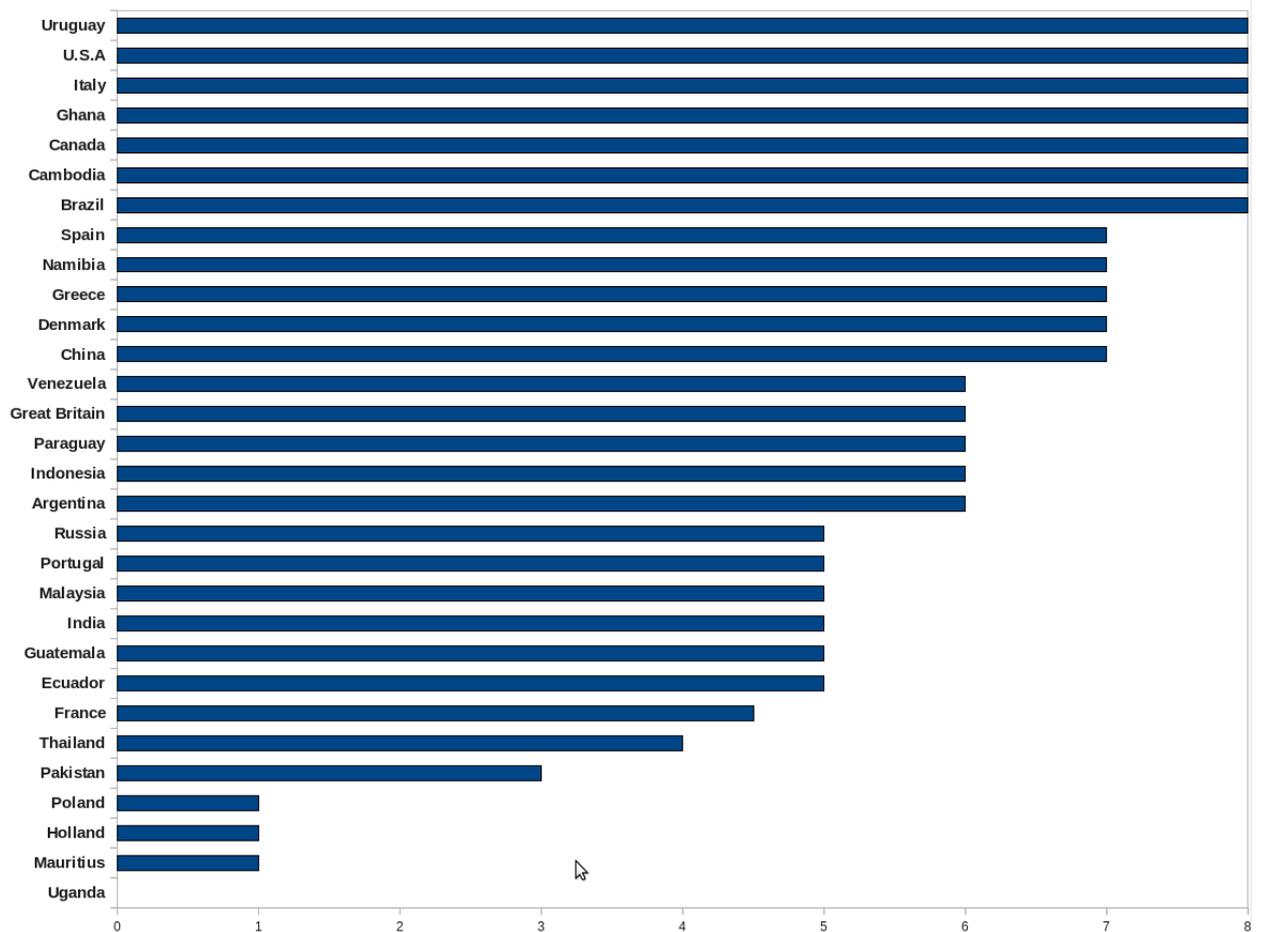


Figure 3: "Open standards and Open development process" ranking. Source: ONSFA. 2011

2.2 Vendor independence and flexibility. Domestic economy.

The fact that open source software is based on open standards and regulations means that vendors can be changed at any time, so customers can choose the best solution in terms of cost and the features provided. Open source software therefore helps reduce dependence on multinational software companies and promotes the national ICT sector, enabling smaller companies to compete and benefit from the increased opportunity to do business with public administrations.

Considering only the scores obtained for "Vendor independence and flexibility. Domestic economy. ," we can see that 47% of the countries consider this criterion to be very important and important. Spain is among this group of countries.

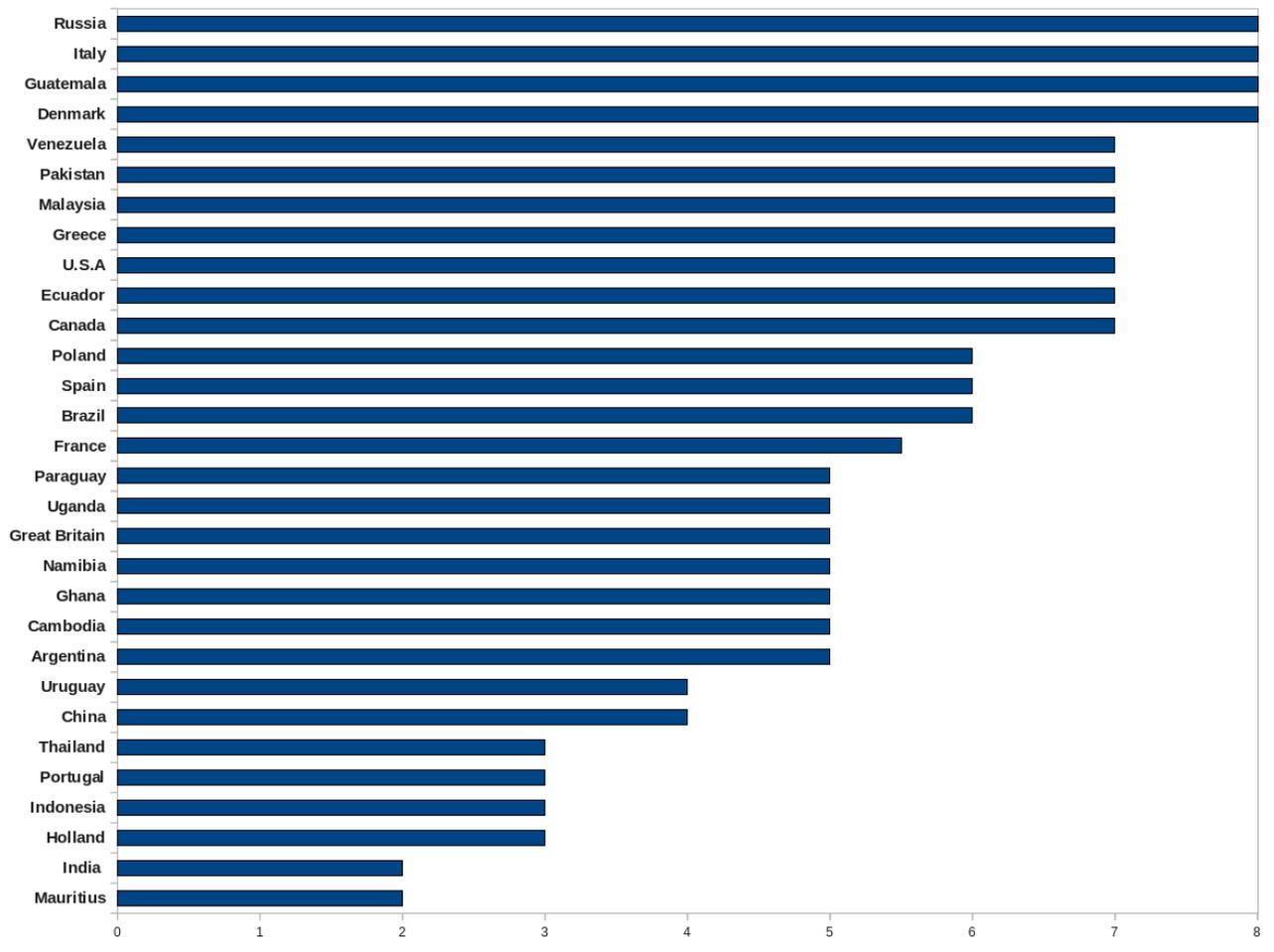
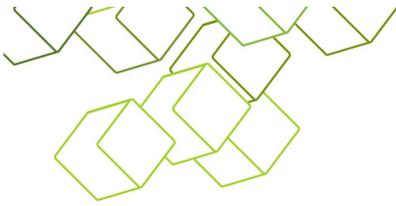


Figure 4: “Vendor independence and flexibility. Domestic economy.” ranking. Source: ONSFA. 2011.

2.3 Low total cost of ownership

Widespread use of open source software reduces costs by taking advantage of economies of scale and the reuse of code. It is recommended that software procurement or migrations be carried out independently of acquired licenses. It is crucial to assess the Total Cost of Ownership, including all relevant factors. The initial purchase price is easily measured, but this is just one of the many factors to calculate the TCO. User training, maintenance needs, updates and support must also be taken into consideration.

Considering only each country’s score for “Low total ownership cost,” we can see that 50% of the countries consider this criterion to be very important and important. However, Spain does not consider TCO to be a very important criterion for the adoption of open source software.

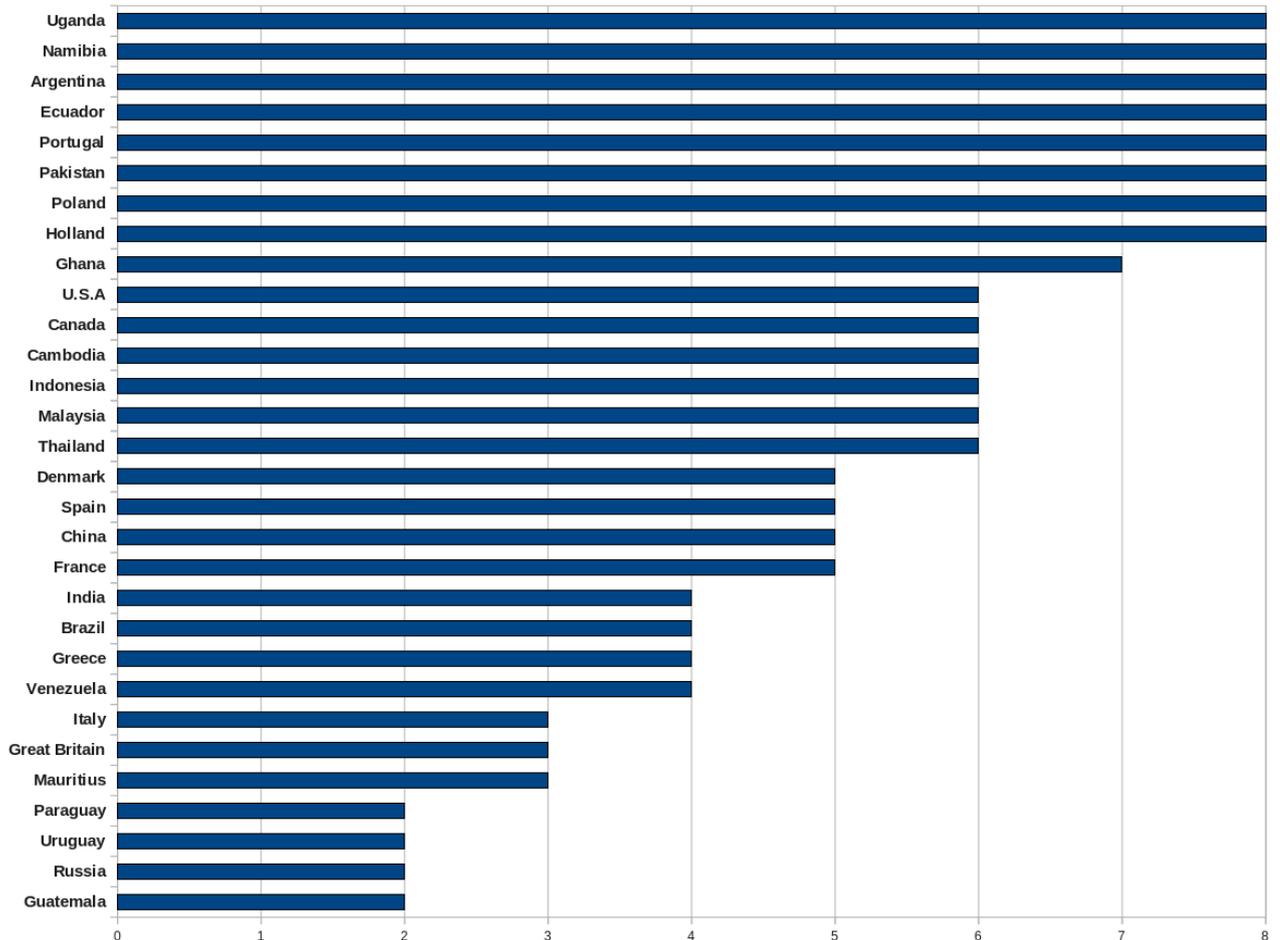
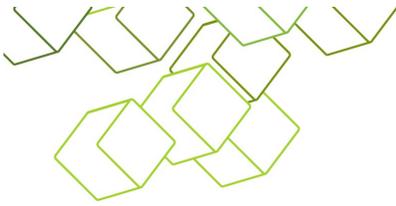


Figure 5: “Low total cost of ownership” ranking. Source: ONSFA. 2011

2.4 Availability of applications

There are a large number of programs and a great deal of support in the open source software sector. Commercial companies would need to dedicate several million Euros and thousands of people each year to produce the equivalent of the open source software currently available. This availability is one of the great advantages of open source software, which, as a general rule, takes advantage of the work that has already been done to develop new solutions, eliminating the need to constantly reinvent the wheel. Considering only each country’s score for “Availability of applications,” we can see that approximately 43% of the countries consider this criterion to be very important and important. However, Spain does not consider availability to be an important criterion when adopting open source software.

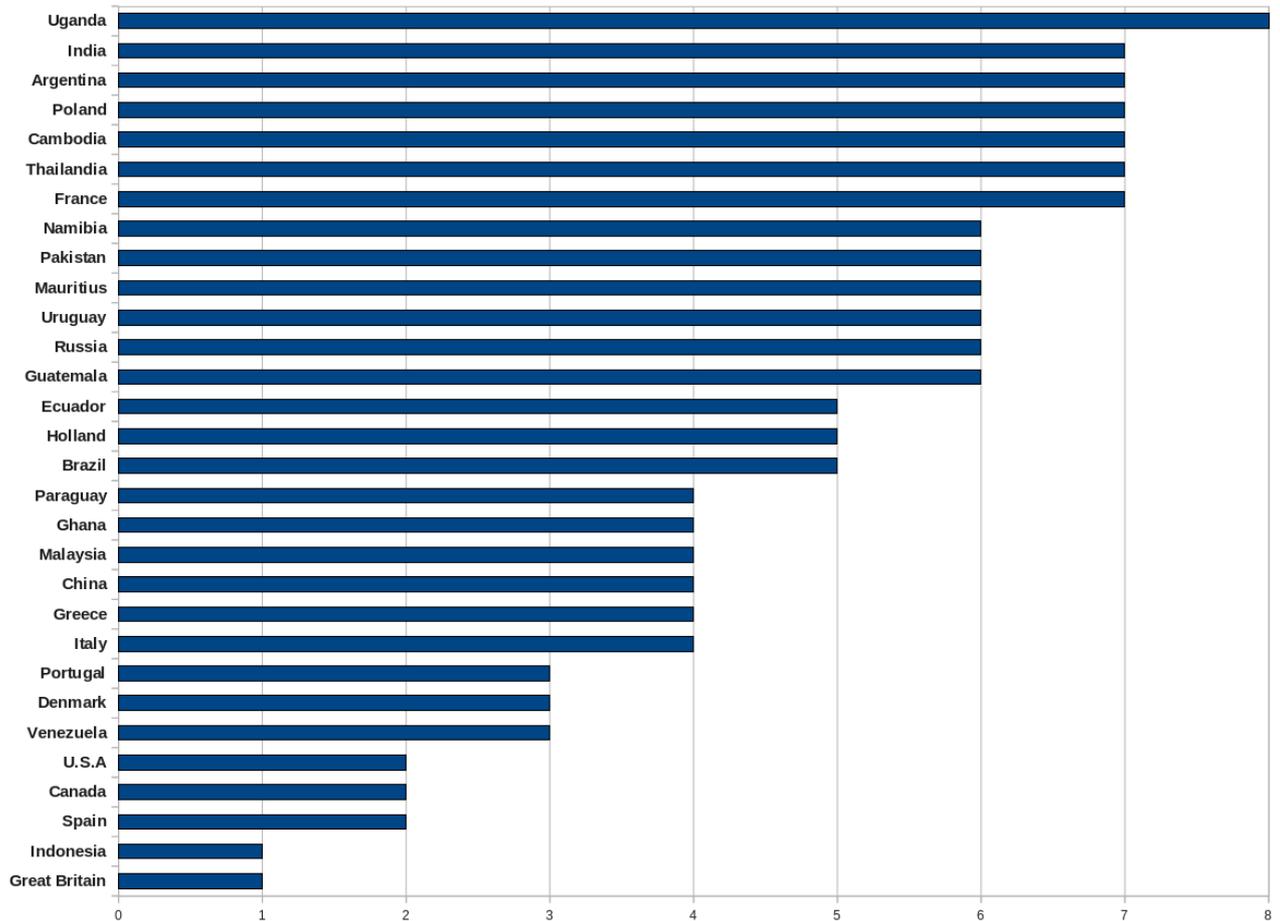
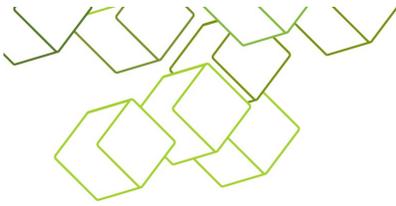


Figure 6: "Availability of applications" ranking. Source: ONSFA. 2011

2.5 Access to source code

Access to an information system's code means that its computer programs can be modified in order to improve them, adapt them to our needs and subsequently distribute these adaptations. This free access to programming code makes it possible to adapt the programs, modify them and progressively debug them without having to rely on the exclusive support of a single vendor. Likewise, it provides the opportunity to solve any possible errors or security flaws faster and it facilitates the tasks associated with translating a product into other linguistic modes.

Considering only each country's score for "Access to open code," we can see that 27% of the countries consider this criterion to be very important and important. Spain considers this to be the most important criterion for adopting open source software.

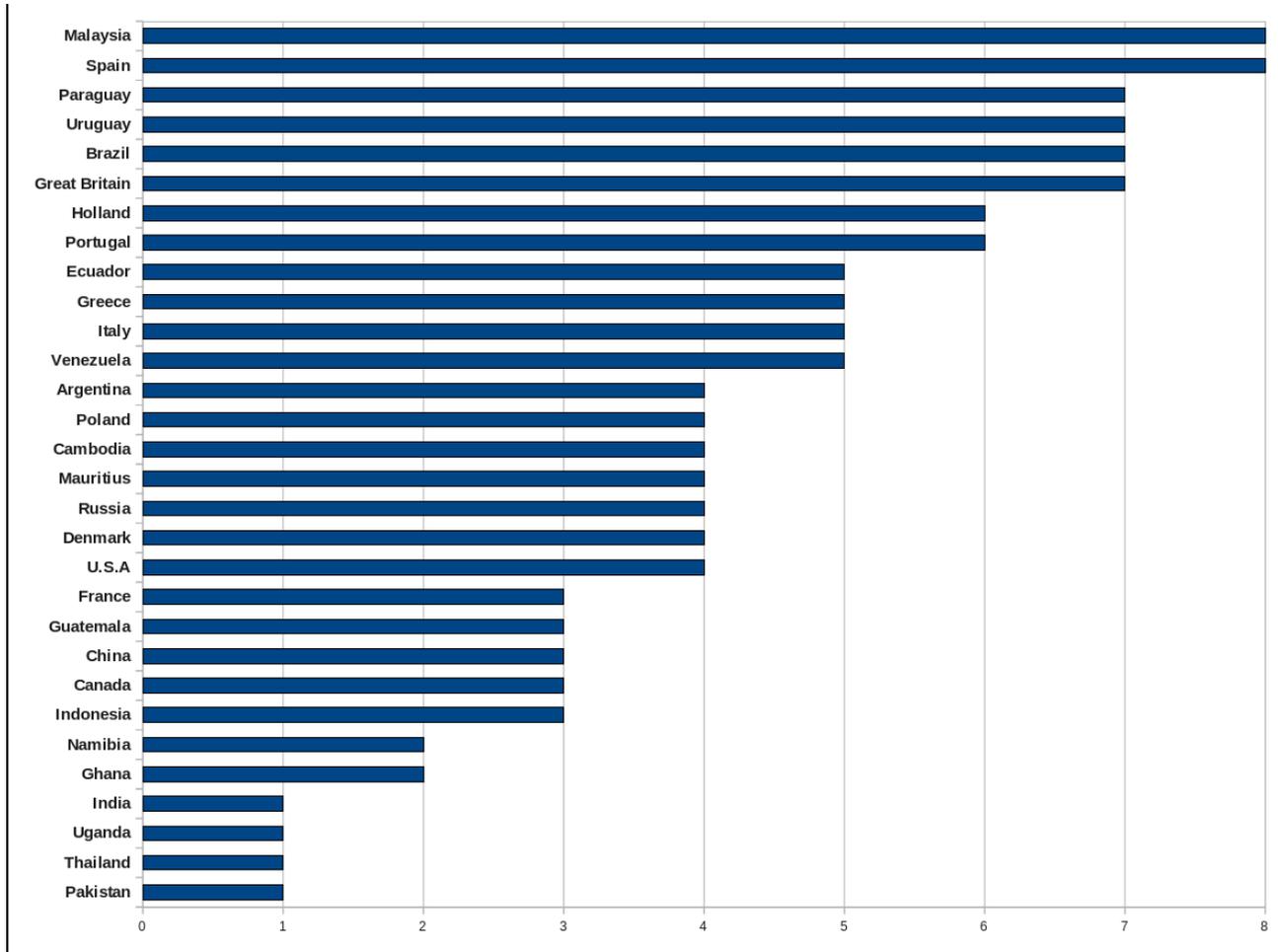
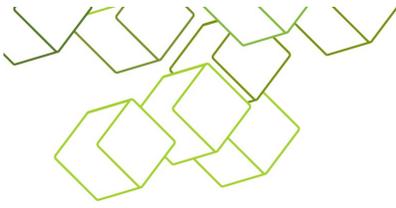


Figure 7: "Access to source code" ranking. Source:ONSFA 2011

2.6 Political decisions and initiatives

Strong support from different Public Administrations is evident, to the point that it has occasionally been incorporated into the framework of the institutions they govern. As a result of this support, administrations have developed an ecosystem of people related to open source software at all levels, including political, administrative, business, social, etc. This powerful ecosystem clearly favours project development based on open source software, as well as the creation of projects and initiatives with a social and participative approach to technological development itself.

Considering only each country's score for "Political decisions or initiatives," we can see that 37% of the countries consider this criterion to be very important and important. However, Spain does not consider this criterion to be a determining factor in the adoption of open source software.

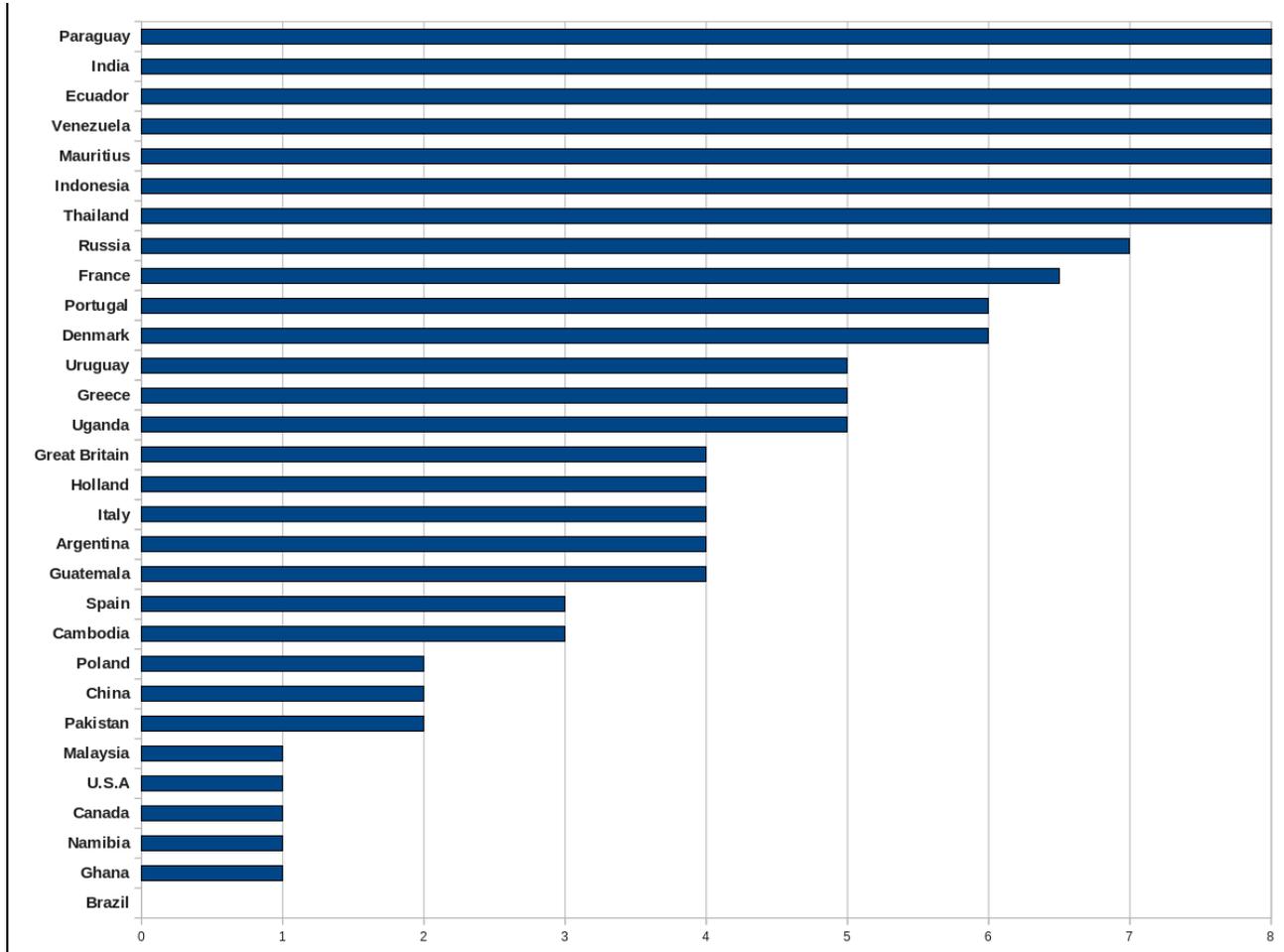
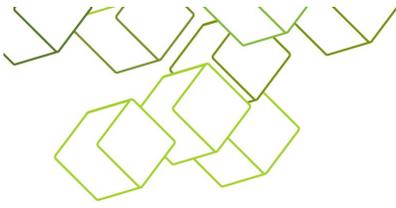


Figure 8: "Political decisions and initiatives" ranking. Source: ONSFA 2011

2.7 Best-of-breed solutions

It is important for Public Administrations to reap the benefits of the adaptations, contributions and improvements they have contributed to (either directly or through outsourcing) as part of the development of the products they use. This improves the quality of the product, enhancing its sustainability as a project and facilitating the adoption of these changes by major manufacturers. These changes are then reflected in future versions, accompanied by a subsequent reduction in the budget needed to integrate and adapt these new versions.

Considering only each country's score for "Best-of-breed solutions" we can see that 23% of the countries consider this criterion to be very important and important. However, Spain does not consider this criterion to be a determining factor in the adoption of open source software; in fact, it is the criterion rated lowest by Spain.

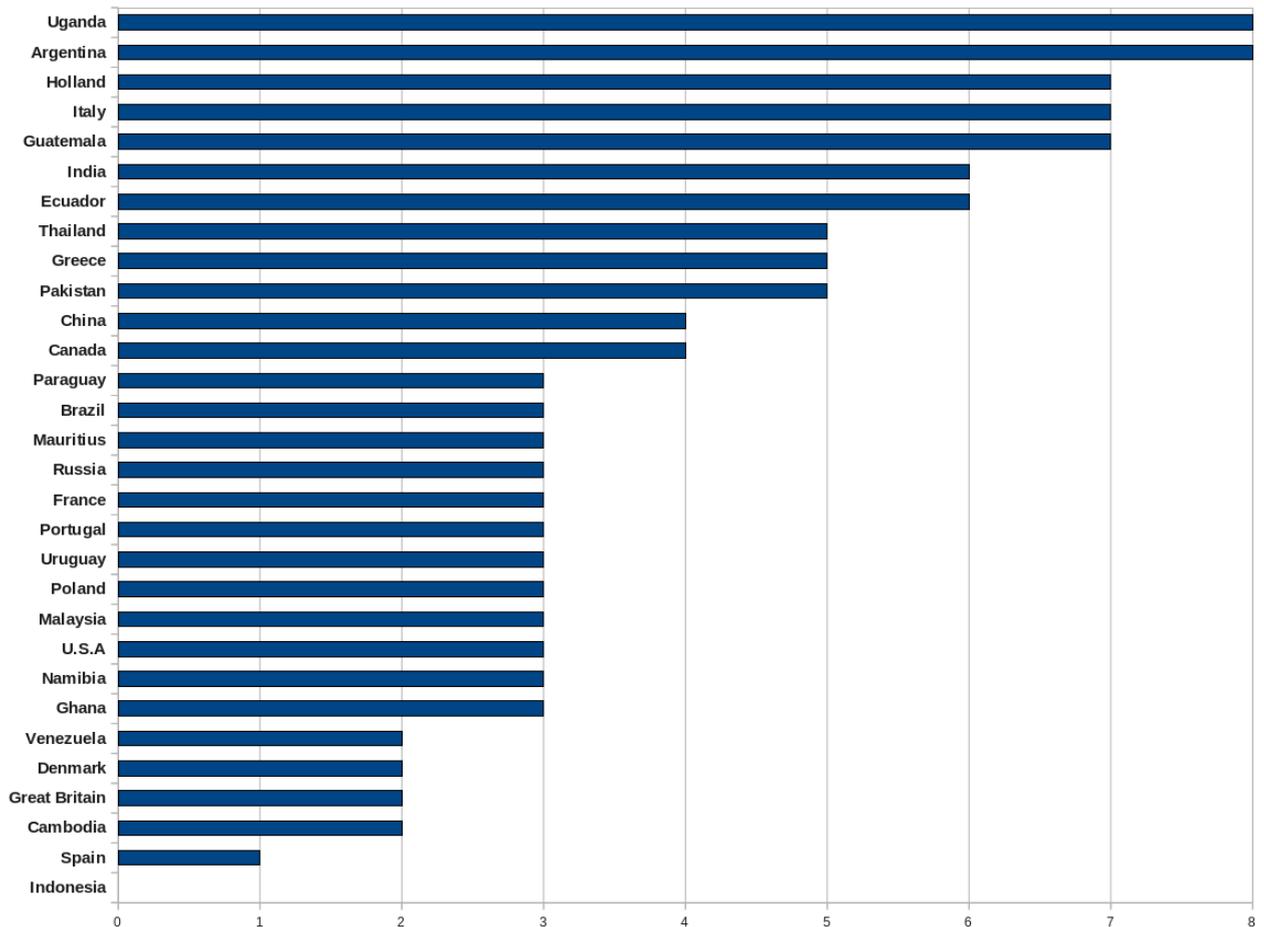
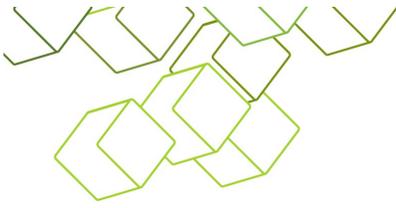


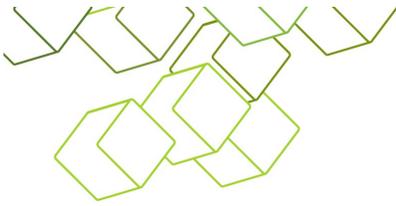
Figure 9: "Best-of-breed solutions" ranking. Source: ONSFA 2011

2.8 Faster procurement

As set out in the legal analysis of the administrative guidelines in the Netherlands¹, the procurement of open source software does not necessarily imply the need for a tender process. This applies in specific situations, for example when software can be acquired free of charge, meaning that not only the licenses are free, but so are the manuals, support and services. If paid services and technical support are necessary, they may be obtained through a separate tender process.¹

Considering only each country's score for "Faster acquisition," we can see that 10% of the countries consider this criterion to be very important and important. It should be pointed out that only two countries view "fast procurement" as important, and nearly 50% of the countries consider it to be the least important criterion. On

¹ www.osor.eu/idabc-studies/OSS-procurement-guideline%20-final.pdf



average, Spain does not consider this criterion for adopting open source software.

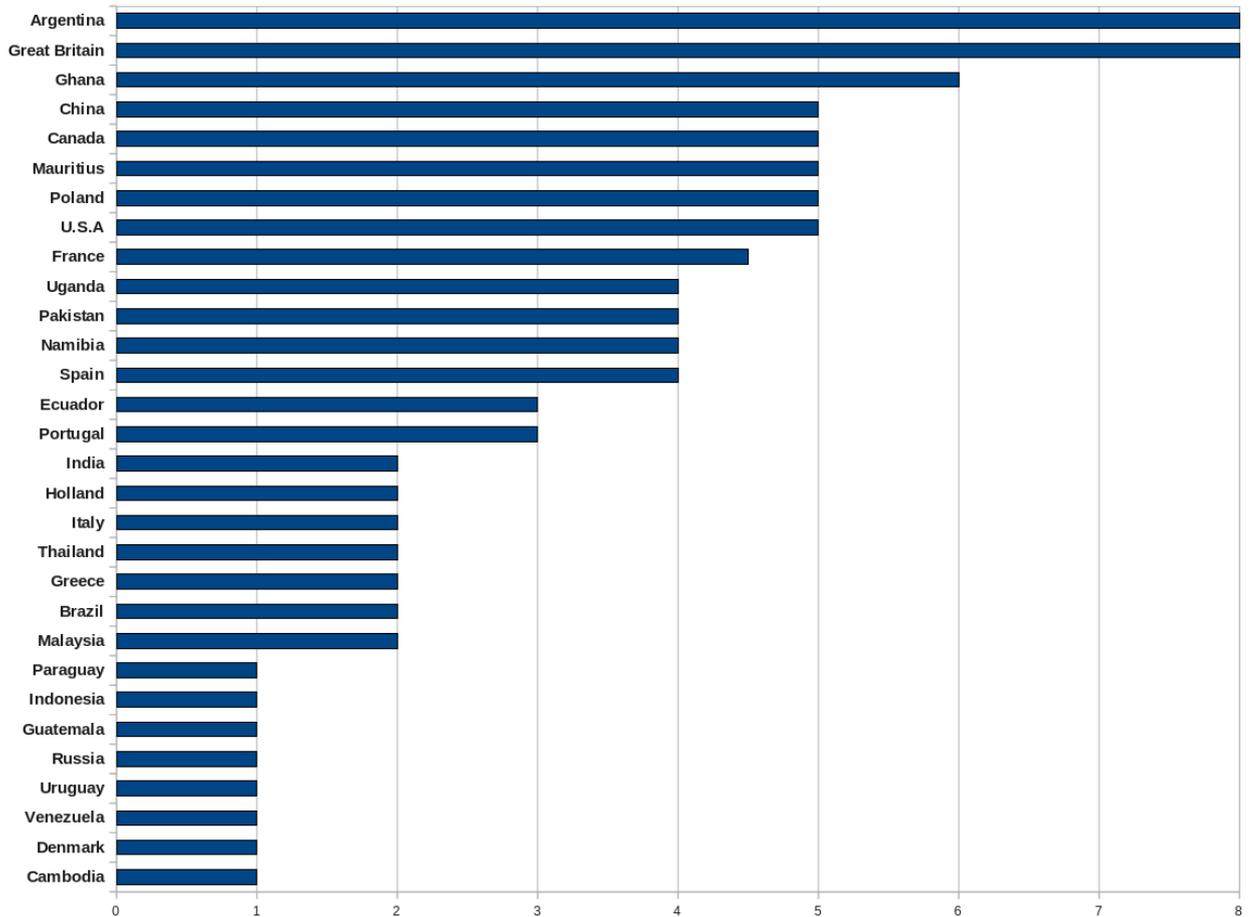


Figure 10: "Faster procurement" ranking. Source: ONSFA 2011

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