

European Open Data Policy: Challenges and Opportunities

Carl-Christian Buhr, Thibaut Kleiner*

Key points

This article presents a number of challenges and opportunities for a European open data policy which represents an opportunity to generate new economic activity in the European Union and to deliver on the premises of an open and participative democracy.

As a consequence of the current development in the area of public open data policies, and also as a result of the Commission's actions and legislative initiative, a genuine shift in public administrations' approach to the matter can be anticipated. This fundamentally concerns the ways in which public administrations interact with their constituencies. As a result of a culture change the new paradigm brings about a situation in which public administrations act as resource-providers in an open data eco-system.

If people put data on the Web – government data, scientific data, community data – whatever it is, it will be used by other people to do wonderful things in ways they never could have imagined.

— Tim Berners-Lee, TED, February 2010

Data is the new oil of the knowledge economy. The US Library of Congress collected 235 terabytes of data in April 2011 alone (Manyika et al., 2011). As the steam engine powered with coal is the symbol of the industrial revolution, our digital era is based on micro-chips processing data. Data allows analysis and codes taking form, to create new services and applications. But data has to be produced and be made available in a way that makes its re-use and exploitation possible and straightforward enough for businesses, within a sound legal framework that secures such new usages without damaging copyright and data protection.

1 Policy context

1.1 What is open data?

'Public data' can be defined as all the information that public bodies produce, collect or pay for. Public data is quite varied and can include geographical data, statistics, meteorological data, data from publicly funded research projects, and digitised books from libraries. Generally, this data is collected by the public bodies in the framework of their public service missions, or as a consequence of them. It is not produced – nor paid for – with a view to be re-used by the public.

'Open data' by contrast can be described as data that is readily accessible to be easily consulted and re-used by anyone

with access to a computer. It is a raw material that can be analysed and exploited. 'Readily accessible' means much more than the mere absence of a restriction of access to the public and requires an active access and re-use policy of the data provider. Re-use of public sector information (PSI) means any creative use of the data, for instance by exploiting public data in a novel manner in order to give it a commercial value, or by combining different data sets from different sources to produce new results and new applications.

However, access and re-use of data can be made difficult by public authorities – often unintentionally – because of a number of barriers:

- A lack of information that certain types of data actually exists and is accessible;
- A lack of clarity of which public authority holds the data;
- A lack of clarity about the terms of re-use;
- Data which is made available only in formats that are difficult or expensive to use;
- Complicated licensing procedures or prohibitive fees;
- Unfair competition practices between the public and the private sectors;
- Exclusive re-use agreements with one commercial actor or a government-owned company.

In the past few years a new policy agenda has emerged that aims to tackle these problems and to underline the benefits of open data. It is based on the insight that making public sector information available for re-use can create both an instrument for a more transparent and efficient public administration and a raw material for new commercial uses that are beneficial for the economy and society.

A prominent early advocate of this approach, for example, was Vivek Kundra, since 2007 as Chief Technology Officer of Washington, DC and from 2009 to 2011 of the Federal Government of the United States. Since then it has rapidly spread across the globe. As Kulveer Ranger, Director for Digital London explained, "Open data is absolutely core to what we do. There was a huge political debate about transparency when we first came into administration in 2008. That transparency debate led to a conversation about data and the power of it if you let it become free" (Solon, 2011).

1.2 Economic benefits of open data

Opening up governmental data for re-use can have major benefits for citizens, businesses, and society, as well as for the

* The authors are members of the cabinet of European Commission Vice-President Neelie Kroes in Brussels, Belgium. Any views expressed in this article are theirs alone and do not necessarily represent the official views of the European Commission.

public administrations providing the data. Businesses can use PSI in various ways: for their own business (e.g. to optimise the way they produce their goods and services)¹ or as an input for other products (e.g. geo-location data used to provide location-based services). For that reason, the 2009 'Digital Britain' report recognised that data was an innovation currency and the lifeblood of the knowledge economy (United Kingdom, 2009). Facilitating re-use of PSI can create jobs and stimulate growth.

A study for the European Commission estimates the total market for public sector information in 2008 at €28 billion across the EU (Vickery, 2011). It also indicates that the overall economic gain from further opening up public sector information by allowing easy access are in the order of €40 billion a year for the EU-27. However, the total direct and indirect economic gains from easier PSI re-use across the whole EU-27 economy would be in the order of €140 billion annually. In particular, the market size and growth of the geographic information sector shows the potential of public data as an engine for job creation. The German market for geo-information in 2007 was estimated at €1.4 billion, a 50% increase since 2000 (Fornfeld, Boele-Keimer, Recher & Fanning, 2008). In the Netherlands, the geo-sector accounted for 15.000 full time employees in 2008. Other types of data, such as meteorological data, legal or business information also form the basis of steadily growing markets.

Open data is also a powerful instrument to increase transparency in public administration, improving the visibility of previously inaccessible information, informing citizens and businesses about policies, public spending and outcomes. For instance, crowd-sourcing of information makes it possible to obtain real-time feed-back from users on the quality of public services (e.g. information on broken traffic lights or uncollected garbage) or to improve the quality of the data produced by the government. To that extent, open data can be also seen as an enabler and driver of e-government. It contributes to making government services increasingly rely on information technology, automation and reduction of paper to increase productivity.

Finally, open data can underpin evidence-based policy making and administrative efficiency: the availability of solid public data enables evidence-based policy making at all levels of government, resulting in better public services. For instance, the use of public data in education makes it possible to evaluate performance of schools and to identify problems in a pupil's educational development. In London, people looking for accommodation can use open data about transport, public facilities and crime occurrence to figure out whether they want to live in a specific neighborhood.

1.3 Open data as a political agenda for more direct democracy

But open data is not only about economic benefits, and efficiency and cost savings for the government. It is also a matter of democratic involvement of citizens. With public sector information being accessible and re-usable, the whole govern-

ment apparatus becomes more understandable and more accountable (Kroes, 2012 a). Citizens can check whether electoral promises are kept or not; they can check and verify how taxpayers' money is spent. In addition, transparency is an effective tool against corruption, cronyism and waste of public funds. For instance, Estonia's advanced open data policy is seen as a positive element compared to its Baltic neighbours (see, e.g., www.freedomhouse.org/report/nations-transit/2012/estonia).²

In addition, open data improves the ability of citizens to engage in direct democracy. They can also interact more openly and effectively with government agencies, e.g. providing opinions on on-going legislative actions, and on the achievements of specific policies. For example, many cities currently experiment with the direct consultation of citizens on local legislation and the execution of public budgets.

2 The European Commission's policy to support open data

The Commission has developed a series of actions to support open data policy. A series of complementary tools are being mobilised to stimulate the actions of Member States and to nurture and support the push for open data that originated with civil society communities and activists. For example, the Commission is stimulating exchange of best practices between Member States.³

2.1 A revised legislative framework conducive to openness and re-use

One of the key elements in the Commission's policy is the revision of the Directive on the re-use of public sector information. This 2003 'PSI Directive' already introduced a number of key elements for re-use of public sector information and aimed at establishing a uniform framework across Europe. However, as the open data movement as we know it today did not yet exist, the Directive suffers from a lack of vision and falls short of being an effective vector for bringing about a growth of open data from the public sector. For this reason the Commission has proposed, in late 2011, a more ambitious version of the Directive in order to unleash the potential of PSI as open data.

First, the Commission's proposal on PSI introduces the principle of re-usability by default: all public information that is not explicitly covered by one of the exceptions is re-usable for commercial and non-commercial purposes.

1 For instance, a producer of umbrellas that are sold by local merchants in cities may optimise its dispatching of goods on the basis of weather forecasts.

2 In this context it is worth mentioning the open government partnership (www.opengovpartnership.org) which aims to secure concrete commitments from governments to promote transparency, empower citizens, fight corruption, and harness new technologies to strengthen governance. In the spirit of multi-stakeholder collaboration, the partnership is overseen by a steering committee of governments and civil society organizations.

3 e.g. in the EPSI network (retrieved from <http://epsiplatform.eu>).

Second, the proposal also sets the amount that can be charged for public sector information at not more than the marginal costs of dissemination; in exceptional cases, however, charging the full costs for producing and disseminating the information remains possible.

Third, it expands the scope of the Directive to include libraries, archives, museums and university libraries in a way that limits the possible financial effects and does not impose a major administrative burden on these institutions which are exempted under the version of the Directive that is currently in force. Since the holdings of cultural institutions are often still covered by copyright or other restrictions, making at least catalogue and bibliographic information available as widely as possible will be key. This is a very good illustration of the strong link that exists between the Commission's Open Data policy (European Commission, 2011 b), its public culture policy (European Commission, 2011 a) and the European digital public library (for more information visit <http://europeana.eu>) as well as its policy of ensuring free online access to publicly-funded research results (European Commission, 2012).

But the Commission did not only focus on PSI and open data in the Member States. It also acted at the level of the Commission's data itself: The Commission adopted new rules for the re-use of its own information resources, aiming to lead by ambitious example. Among other aspects, the Commission decided that the data it has collected can be re-used free of charge, and should be available under permissive licenses and in machine-readable formats. At the same time, the Commission extended the scope of its own re-use policies to now also include research results produced by the Commission's direct research activities in the eight institutes that make up the Joint Research Centre (<http://ec.europa.eu/dgs/jrc>). In addition the Commission committed to explore whether and how other EU institutions and key European agencies could be lead to adopt similar rules for the information they collect.

2.2 Financial support for open data

The Commission is supporting open data through its funding programmes, in particular in the area of research and innovation, through the Seventh Framework Programme for Research and through the Competitiveness and Innovation Programmed. In addition to supporting exchange of best practices between Member States, the Commission aims at the uptake of open data approaches and solutions. This takes place through the funding of pilot actions, testing and showcasing. In addition, the Commission helps organise open data competitions to foster the development of new information services, and takes the initiative to improve access to capital for entrepreneurs who build new information services based on public sector data.

In general, the Commission is also supporting research and development in areas that sustain open data. Data-handling technologies and in particular data mining, analytics and visualisation are technologies that underpin growth and innovation in the field of open data and data re-use. In the period

2011-2013 the Commission spends around €100 million on R&D in these fields.

2.3 Support for data portals

Citizens and business sometimes find it difficult to know what kind of information exists and which authority holds this information, in particular if the information is in another Member State where the structure of government may be different. Open data portals can solve this problem by providing a one-stop-entry to a multitude of data.

A number of countries, regions and municipalities have already created portal websites to provide access to data.⁴ In order to facilitate the development of information products and services combining data from across the European Union, the Commission is currently working towards the launch of two interlinked European data portals. In 2012 it will start operating a portal that will make the Commission's own data resources and those of other European institutions and agencies easily accessible and usable. For 2013 the launch of a pan-European data portal is planned which will federate and unify access to national data portals such as those listed above.

3 Beyond Data on Request

As a consequence of the current development in the area of public open data policies, and also as a result of the Commission's actions and legislative initiative, a genuine shift in public administrations' approach to the matter can be anticipated. This fundamentally concerns the ways in which public administrations interact with their constituencies. As a result of a culture change the new paradigm brings about a situation in which public administrations act as resource-providers in an open data eco-system.

3.1 Open data by default

The spirit behind the proposal for a revised PSI Directive goes much beyond a situation in which public bodies should simply respond to individual and ad-hoc requests for information. In fact, checking whether or not such individual requests should be answered positively can very quickly become prohibitively costly for public bodies. Therefore, in so far as public bodies process their information electronically, the underlying systems should successively be equipped with the ability to make their data publicly available automatically. Besides driving down the marginal costs of actually making the information available to anybody who wants it, this would solve the following three problems:

- The accessibility of any class of information (or type of document) would only have to be ascertained once (and openness should be the default outcome, i.e. information should be made publicly available unless there are specific

⁴ For more information, refer to the following examples: <http://open-data.paris.fr>; www.dati.piemonte.it; www.data.gov.uk; www.data.gouv.fr; and www.data.overheid.nl.

reasons against). The number of individual cases to check, and the associated costs, would go down dramatically.

- Building a public access module into existing systems (when extended) or new systems as a matter of principle is likely to lead to better and cheaper solutions than grafting on such models in response to mounting requests for specific types of data when a system is already in operation. In fact, it is likely that such modules would quickly become a standard part of relevant software offerings.
- Making a public body's data directly made available from its normal IT systems, no problem of updates and consistency can arise which would result from (even regularly repeated) copying of information into other systems.

3.2 Machine-readable formats and metadata

Machine-readability, inter-operability and standards for metadata are essential elements for the successful implementation of open data policy. In the long run it is not sufficient for public administrations to simply put data online. What is needed to support the open data eco-system is to provide data that has already a certain degree of structure and to provide it indefinitely and reliably – in a sense the provision of public data becomes a new public service in its own right.

The PSI Directive proposal foresees that Member States make data available in 'machine-readable' format, meaning “that digital documents are sufficiently structured for software applications to identify reliably individual statements of fact and their internal structure” (European Commission, 2011 c). It links this definition to interoperability which can generally be understood to require the use of formats whose features are clearly defined and known to all parties concerned.

In this context the concept of metadata is essential. Data can be in a perfect format and still be essentially useless if their exact scope or remit is not sufficiently explained. Structured metadata is one way of providing as much as possible of that explanation in a machine-readable way.⁵

3.3 Open licenses

Licenses can also contribute to a seamless processing of data – or, by contrast, they can represent real obstacles to the re-use of PSI. For that reason, the Commission's proposal sets out that where conditions on re-use of public sector information are imposed, “where appropriate through a license”, they “shall not unnecessarily restrict possibilities for re-use and shall not be used to restrict competition” (European Commission, 2011 c). In addition, the explanatory part of the proposal clarifies that licenses “should in any case place as few restrictions on re-use as possible” and refers to “[o]pen licenses available online” which can be read as a hint at the suite of licenses provided by Creative Commons (see also <http://creativecommons.org>) and comparable approaches. To facilitate this, the Commission foresees to give guidance to Member States (and thus the national public bodies) “on recommended

licensing conditions and on formats” (European Commission, 2011 c).

4 Open Data Synergy

Generally, open data can support a number of policy areas. For instance, transport and route planning can only be optimised if information on timetables and the real-time movement of trains and buses is made available. But open data should also be seen as an essential complement to other policy areas. In this last section we will briefly look beyond dedicated open data policies to see how they link to related EU policies, in particular in the area of the Digital Agenda for Europe (European Commission, 2010).

4.1 E-Government

Open data could come to be seen as the starting point for a public service revolution because it pushes e-government services to resemble open data businesses more and more and to become more automated and cost-efficient.

First, open data could be built with the help of Application Programming Interfaces (APIs) and a service-oriented architecture on top of the underlying database (in such a setting the APIs provide for well-defined ways for users of that database to interact with the data programmatically, i.e. in an automated fashion). In this way any update to the underlying data becomes automatically available throughout all e-government services using that database, or built on top of it, i.e. seamlessly and directly from the running public administration IT systems – and not as an afterthought relying on manual or semi-manual data dumps from the database to some other place from which the data would then be made available.

Second, public administrations could outsource a number of services to specialised operators and applications (Robinson, Harlan, Zeller, & Felten, 2009), whose task would be to deliver the service in an ever more efficient way, whereas the public administration would focus on keeping the underlying database secure, functional and up-to-date.⁶

4.2 Open data cloud

Open data is linked to another prominent Digital Agenda policy interest (Kroes, 2012 b): Cloud computing. In fact, the cloud is the perfect platform for rapid experimentation and prototyping of new data-based services, for public and private

5 Of course, at a certain level of abstraction human understanding will always be required to make sense of data and to decide, for example, whether a certain set of budgetary information can be usefully compared with another set of data. However, the boundary between automated tasks and others is fluid – higher-order standards allow raw information to be linked to more general concepts. This is a field of vibrant research in the field of “semantic web” technologies, also supported by the Commission's research funding.

6 Examples: Route planning for public transport based on underlying timetables, service plans, station information etc.; weather forecasts based on environmental information collected and provided by a public body; services informing users about public works, publicly registered events etc.

bodies alike. Cloud computing further lowers the cost for innovative companies for getting involved in a new field – as it frees them from the need to invest in and install a whole IT infrastructure to only start providing a service such as route planning. The solution can be cloud-hosted and scaled up rapidly if it works. The Commission is implementing a cloud computing strategy⁷ to make adoption of cloud solutions simpler and faster across the whole European economy. This particularly applies to the public sector, i.e. the data access modules of new or adapted public IT systems, as described in the previous section, are in fact primary candidates for public sector cloud use.

4.3 Big data

Finally, open data is a key component of another key development: Big Data. Big Data is a new approach to both scientific and practical research that rests on routine analysis of very large amounts of structured data. In science it has already been the case for a while that in some disciplines the “discoveries” often only happen months or years after a relevant phenomenon was first encountered, simply because the amounts of data collected in astronomy or physics are so large that finding ways of making sense of the information is itself a research endeavour.

With the advent of computer-intermediated transactions, whether online (e.g. online advertising or search engine use) or offline (e.g. scanner data in retailing or people movement data in buildings with access control devices at the doors), a new type of problem has arisen: How to make sense of the incoming data (i.e. of data that is legitimately collected and available for analysis and processing in conformance with all applicable data protection laws) in a way that constitutes an improvement of the situation. For example, how to adapt the surroundings in a supermarket to optimally react to the demonstrated behaviour patterns of customers? How to adapt a building to provide for optimal movement paths inside? How to make information on public traffic flows useful for optimising the calibration of traffic lights or other traffic-shaping devices?

There are isolated applications in all of the listed fields, and in many others, but the public sector (or other actors using open data provided by the public sector) is not yet systematically using such possibilities. Open data has the potential of becoming an important ingredient to the big databases underlying this kind of analysis because in many cases they constitute neutral sources of information that cannot be found elsewhere. For example, buying patterns in supermarkets may be more easily explained (and thus the resulting knowledge exploited) if information about the weather or the general traffic situation is included in the relevant database.

5 Conclusion

Open data is a promising policy area in Europe not only with a view to generate economic growth, but also for profoundly

impacting public administrations and, by extension, society. The vision is now in place, and the Commission's proposal for a new PSI directive goes together with strong support to the open data sector through relevant funding mechanisms as well as with the creation of relevant infrastructures such as the pan-European open data portal.

It is a long way from vision to implementation, however. The challenge consists in bringing about the necessary culture change, not least in local, national and European public bodies. One should not under-estimate the efforts and time required. But the potential for opening (and smartening) up government and for creating cloud-based new services and applications and fuelling the big data analytics of the future is compelling.

Our hope therefore is that EU Member State governments, and public bodies throughout the Union, will sooner rather than later start delivering open data and all that it enables and necessitates.

References

- European Commission. (2010). *A Digital Agenda for Europe*. COM(2010) 245.
- European Commission. (2011 a). *Commission Recommendation of 27.10.2011 on the digitisation and online accessibility of cultural material and digital preservation*. COM(2011) 7579.
- European Commission (2011 b) *Open data. An engine for innovation, growth and transparent governance*. COM(2011) 882.
- European Commission. (2011 c). *Proposal for a Directive Amending Directive 2003/98/EC on re-use of public sector information*. COM(2011) 877.
- European Commission. (2012). *Towards better access to scientific information: Boosting the benefits of public investments in research*. COM(2012) 401.
- Fornefeld, M., & Boele-Keimer, G., & Recher, S., & Fanning, M. (2008). *Assessment of the Re-use of Public Sector Information (PSI) in the Geographical Information, Meteorological Information and Legal Information sectors*. Final Report.
- Kroes, N. (2012 a). Open Data From Crisis of Trust to Open Governing. Speech, Bratislava, 5 March 2012.
- Kroes, N. (2012 b). *A European Cloud strategy*. Speech, Brussels, 25 June 2012.
- Manyika, J., & Chui, M., et. al. (2011). *Big data: The next frontier for innovation, competition, and productivity*, McKinsey Global Institute.
- Robinson, D., & Harlan, Y., & Zeller, W., & Felten, E. (2009). Government Data and the Invisible Hand. *Yale Journal of Law and Technology*, 11, 160
- Solon, O. (2011, August 8). London's data-king Kulveer Ranger on the challenges of open data, *Wired*, Retrieved from www.wired.co.uk/news/archive/2011-08/08/kulveer-ranger-on-london-open-data
- United Kingdom, Department for Business Innovation & Skills. (2009). *Digital Britain*. Final report.
- Vickery, G. (2011). Review of recent studies on PSI re-use and related market developments. Retrieved from http://ec.europa.eu/information_society/policy/psi/docs/pdfs/report/psi_final_version_format-ed.docx

⁷ For more information, refer to http://ec.europa.eu/information_society/activities/cloudcomputing/index_en.htm.



Carl-Christian Buhr works at the European Commission since 2007. After three years at the DG Competition where he dealt with antitrust and merger control, he is currently member of cabinet of Neelie Kroes. In 2005, he received his PhD from FernUniversität Hagen. Email: Carl-Christian.Buhr@ec.europa.eu



Thibaut Kleiner is a member of cabinet of Neelie Kroes, where he is in charge of Internet policies at large and robotics. He has worked for the European Commission since 2001. An economist by training, he holds a Master from HEC Paris and a PhD from the London School of Economics. Email: thibaut.kleiner@ec.europa.eu

Die Social-Media-Demokratie: Stellt der Politikbetrieb jetzt auf digitale Kommunikation um?

Tobias Arns, Joachim Bühler

Kernaussagen

Die Rolle sozialer Medien in der Demokratie und beim bürgerschaftlichen Engagement wird derzeit intensiv diskutiert. Der stärkste Impuls für Social-Media-Kommunikation läuft dabei über die politischen Mandatsträger. Die Kommunikation über das Internet direkt mit dem Bürger fördert den Austausch zwischen Repräsentanten und Repräsentierten und kann auf diese Weise zu mehr Transparenz beitragen. Die Verknüpfung von sozialen Medien mit den Prozessen und Verfahren in einer repräsentativen Demokratie bleibt dagegen eine Herausforderung. Legitimationsprobleme ergeben sich durch das ungleiche Nutzungsverhalten der „Netzgemeinde“ und all jenen, die trotz technischer Verfügbarkeit die neuen Möglichkeiten nicht nutzen wollen.

1 Social Media und Politik

Die Rolle von sozialen Medien in der Demokratie und beim bürgerschaftlichen Engagement ist ein derzeit viel diskutiertes Thema. Nicht zuletzt der Anspruch der Piratenpartei, sämtliche Entscheidungen mithilfe von digitalen Kollaborationsplattformen zu treffen, hat der Frage nach dem Nutzen von Social Media im politischen Kontext Auftrieb gegeben. Auch die Proteste im Zusammenhang mit der Änderung des Meldgesetzes spielten sich nicht nur in der „Offline-Welt“ und den etablierten Medien sondern auch in zahlreichen Diskussionen im „Social Web“ ab.

Die Kernfrage in diesem Zusammenhang ist daher, ob das Online-Verhalten von Bürgern und Politikern einen Einfluss auf etablierte „Offline-Politik“ haben kann. Diese Frage ist nicht nur für politische Akteure von großem Interesse, sondern auch für Bürger, die politisch interessiert sind.

Was die technischen Voraussetzungen der digitalen Kommunikation angeht, so ist Deutschland recht gut aufgestellt: Mehr als drei Viertel der Menschen haben einen Internetzugang. Davon haben 74% einen Account bei mindestens einem sozialen Netzwerk (BITKOM 2011 a). Das Potenzial, breite Bevölkerungsschichten über Social Media mit politischen Inhalten zu erreichen, ist also groß.

Das Internet wird bereits von einer Mehrheit der Nutzer als Instrument zur Förderung der Demokratie wahrgenommen. 61% der Internetnutzer ab 14 Jahren gaben in einer Befragung an, dass das Netz ihrer Meinung nach zu mehr Demokratie beitrage (BITKOM 2012). Tatsächlich bieten das Internet und die dort von einer Vielzahl von Menschen genutzten sozialen Medien hervorragende Möglichkeiten, politische Arbeit transparenter zu machen und breite Bevölkerungsschichten einzubeziehen. Es ist aber trotz dieser beeindruckenden Zahlen und des daraus resultierenden positiven Ausblicks wichtig, nicht die Möglichkeit mit der Wirklichkeit gleichzusetzen.

Denn die prinzipiell offenen Internet-Plattformen zum Erstellen und Teilen von digitalen Inhalten sind nicht darauf spezialisiert, demokratische Partizipation zu unterstützen. Außerdem geben Bürger, wenn sie das Internet „betreten“, ihre Werte und Überzeugungen ja nicht beim Login ab.

Die Art und Weise, wie das Internet für politische Aktivitäten genutzt werden, hängt daher sehr stark von den Nutzern ab. Es ist offensichtlich, dass Social-Network-Nutzer ihre politischen Interessen und Einstellungen auf sehr unterschiedliche Weise kundtun können: Sie können sich z.B. klar zu einer Partei bekennen, sie können bestimmte politische Einstellungen in ihren Profilen deutlich machen, sie können sich aber auch – und das trifft wahrscheinlich für die meisten Menschen zu – mit solchen Festlegungen zurückhalten und eher von Fall zu