



mozilla



Challenges of Data Protection

@JobavaL10n

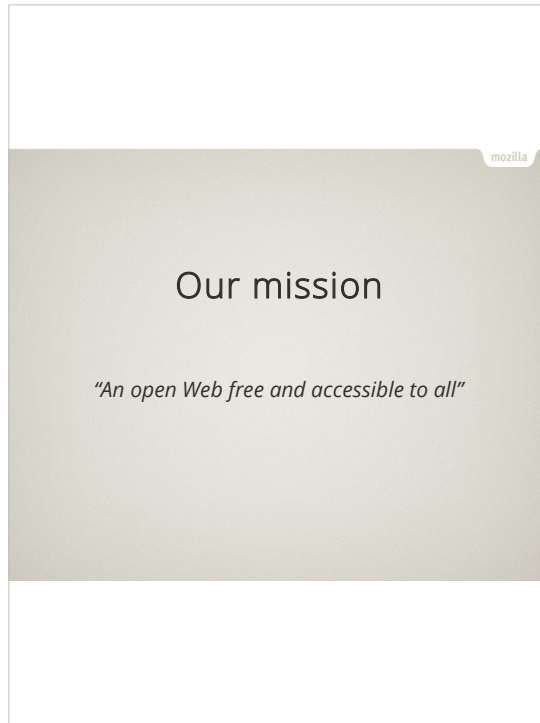


Jobava is my online “handle” and I chose to come here under that name to promote the idea of privacy. I also want to demonstrate that can participate in social discourse under names of their choice and under experiences they can control.

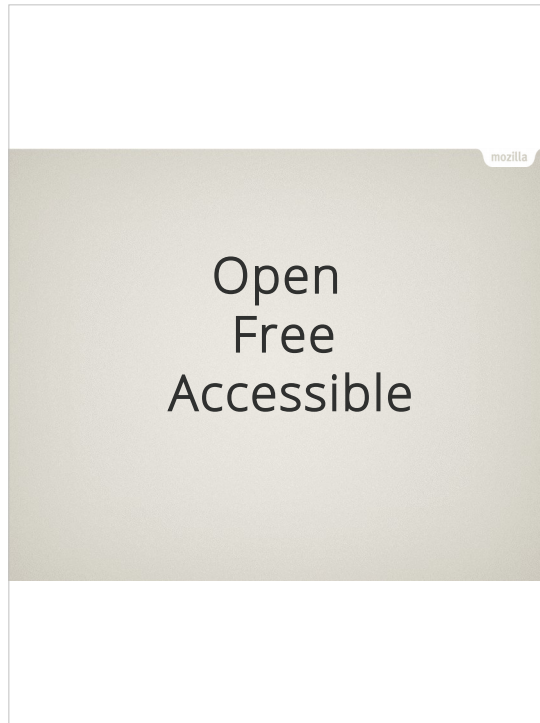
I am also a Mozillian, which is someone part of the Mozilla community. To be a Mozillian you don't need to be a Mozilla employee, if you contribute to the project and the mission, you too can call y ourself a Mozillian.



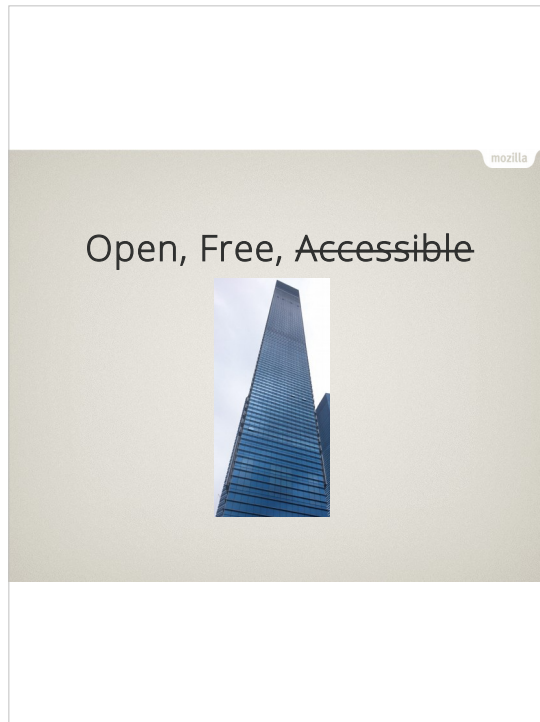
We have several principles, as per our Manifesto, which you can find on our website.



But all that can be boiled down into one: "An open Web, free and accessible to all."



The Web only exists because it has all three characteristics and cannot thrive without any of them.

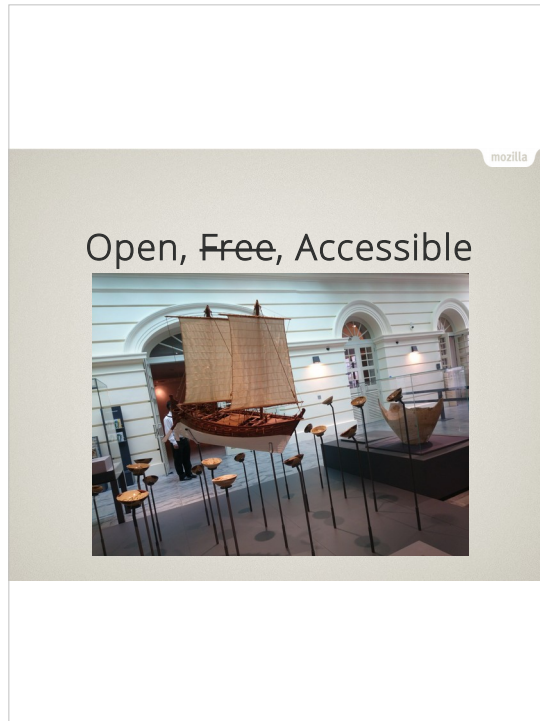


Free and open but not accessible is an 'ivory tower' or a Nirvana which "regular" people can't enter. Such a Web can be one with high technical barriers to entry, like the Web was in the beginning. The Web took off after it became inclusive.

Open, Free, Accessible



Free and accessible but not open is a 'walled garden', a place that may allow freedom and does not exclude people, but where each new experience needs to be vetted by the garden keepers. Such a Web may be useful in many ways, but dependence on a single entity makes it _fragile_. Such a place is also without true free expression and cannot function as a true social medium.



Open and accessible but not free is a 'museum' or 'exhibition' with a "look but don't touch" experience. Such a space does not permit participation by design, even though the designs may be 'open' and 'accessible'. A museum is a 'read-only experience' and such a Web cannot grow and cannot permit participation.



The Web needs all three characteristics to continue into the Cloud age.



Speaking of Cloud, how many of you agree with the assertion on the screen?
[waits a few seconds, then reads the message: "There is no cloud, just other people's computers"]

Well, the Cloud is definitely "other people's computers", but it's very much real. Cloud is the new evolution of computing.



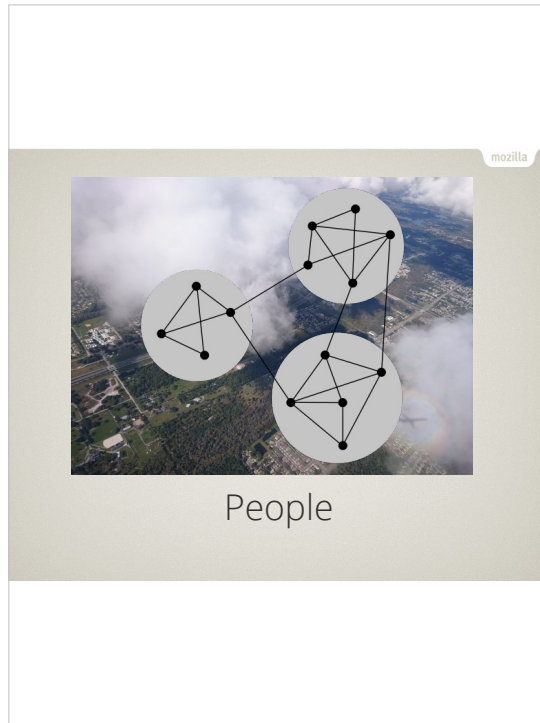
Cloud is the age of where mobility is networked. In recent history we've had a different conception of mobility, with ever powerful computing devices into smaller packages. Personal computing grew so fast that for a short while the datacenter and mainframe were made obsolete. That changed again when Networking entered the picture: the network grew faster than Moore's law.

At that point, we need the support structure of computers far away in order to sustain the mobility of the computers nearby (and our own personal computing mobility). Not only that, the network provides some services which could not be possible under a strictly offline model of computing.

We're talking of mobility as in a 'personal' and also 'business' sense.

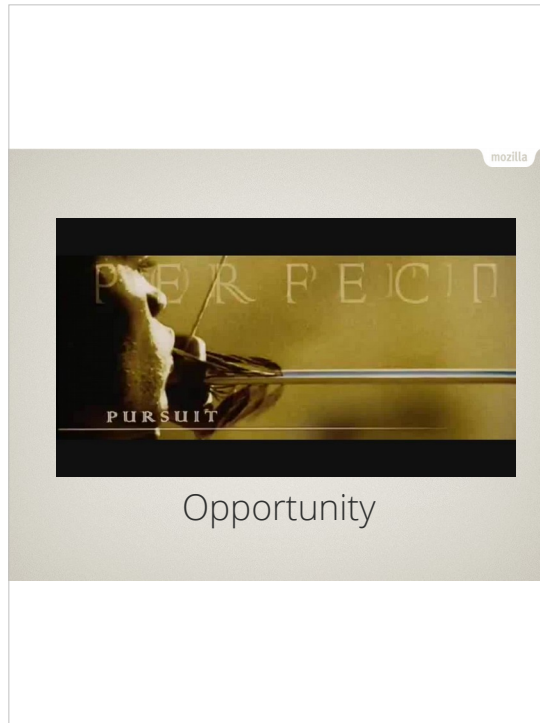


However, as computer enthusiasts, we tend to like the technical aspect and see the cloud as just computers talking to computers. I'd like to make you consider the cloud contains another component: people, or data about people. That data can be as simple as an IP address, username and password, it can be location, full legal name, address and CC number, up to medical records or the content of conversations and the associated data.



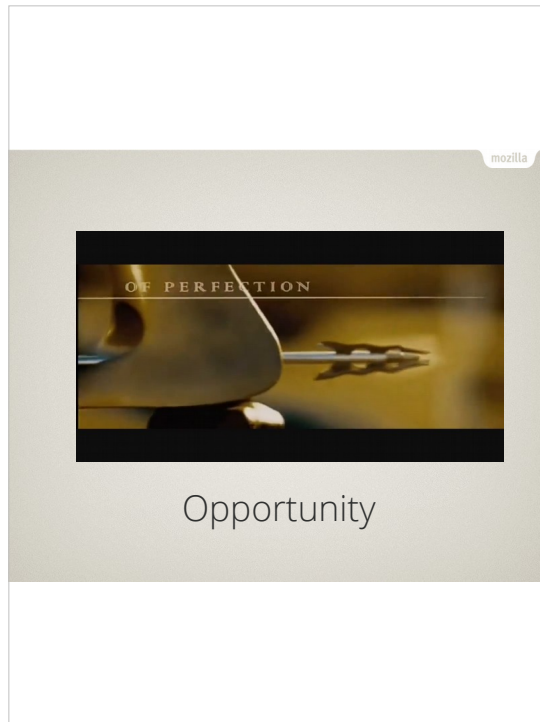
The endpoints of this vast network is not just made of machines, there are also people.

As many would say: “You are not the sum of our possessions” — ‘you are not your phone’, but that phone may contain a part of you, a key into your life and ultimately power over you. When we deal with data that affects people and their personal data, we have to consider that power we wield and our responsibility.

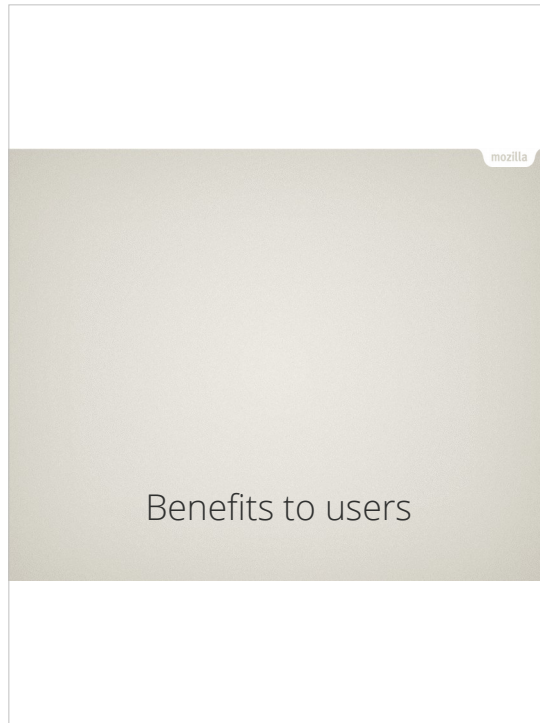


The Cloud also gives us Opportunity.

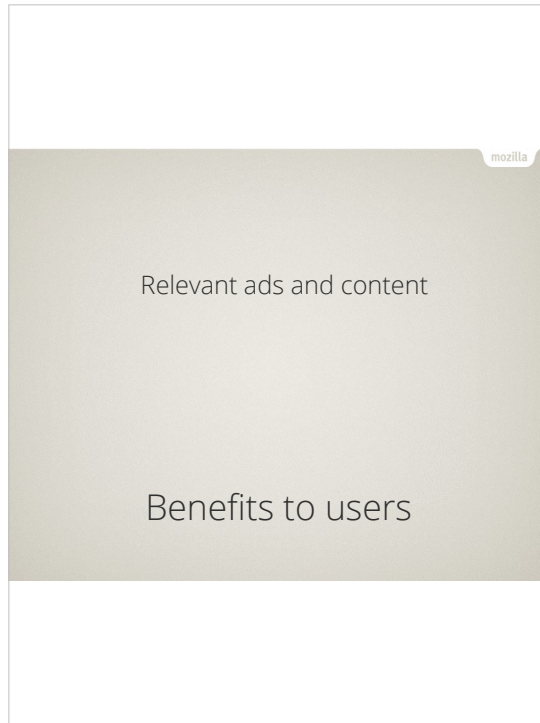
The following is a clip from Minority Report displaying a world of very personalized advertising (and not only).



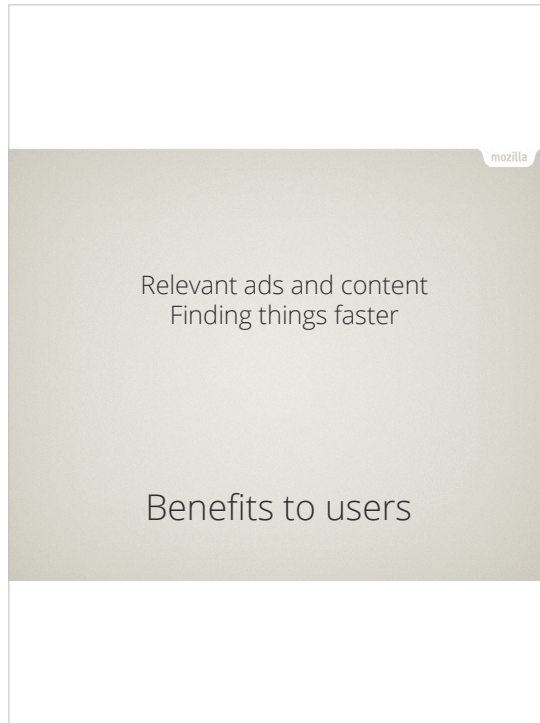
The clip looks futuristic, but it is in fact the common experience of everyday users of the internet.



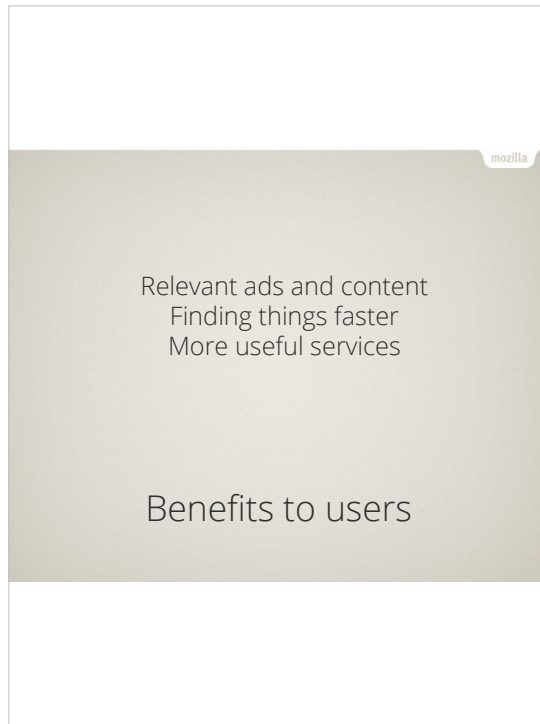
You may be disturbed by this world of ultra-personalized targeting, but there are also benefits the Cloud offers for people.



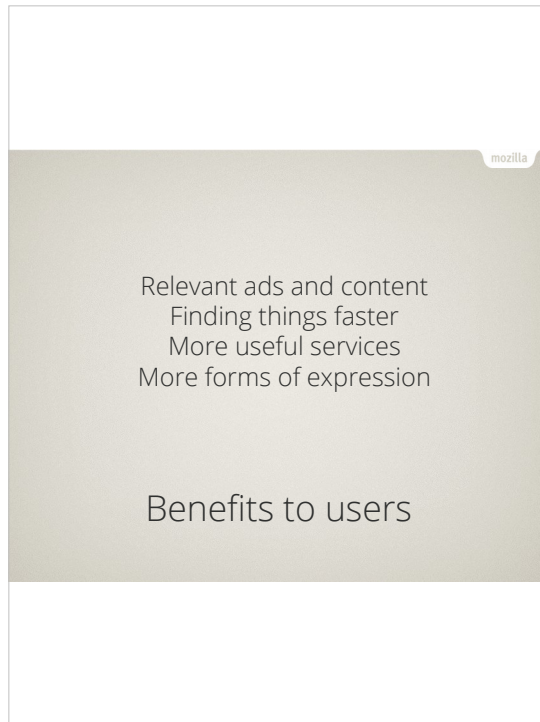
However much we hate ads, we hate more ads which aren't relevant. If someone shows me something I already want to buy then that would be a benefit, a way to meet my desires with a ready-made product already available.



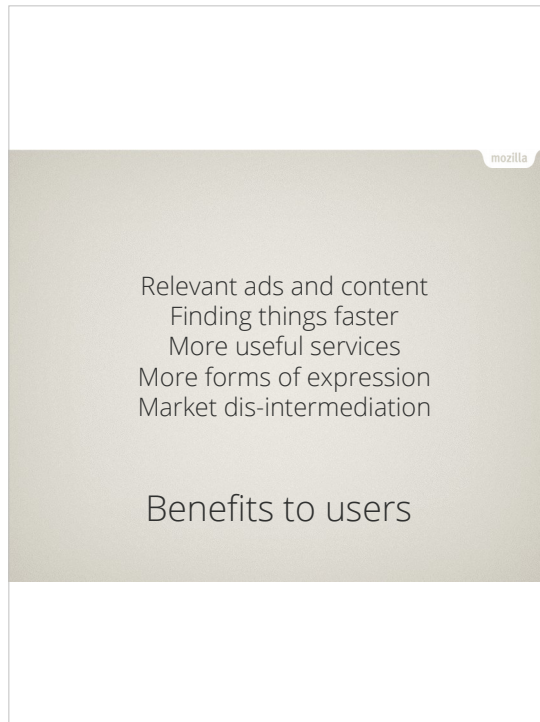
Simply finding things faster on the Web, be that through web searching or exploring large and complex data sets, Cloud offers us flexibility in a quick fashion



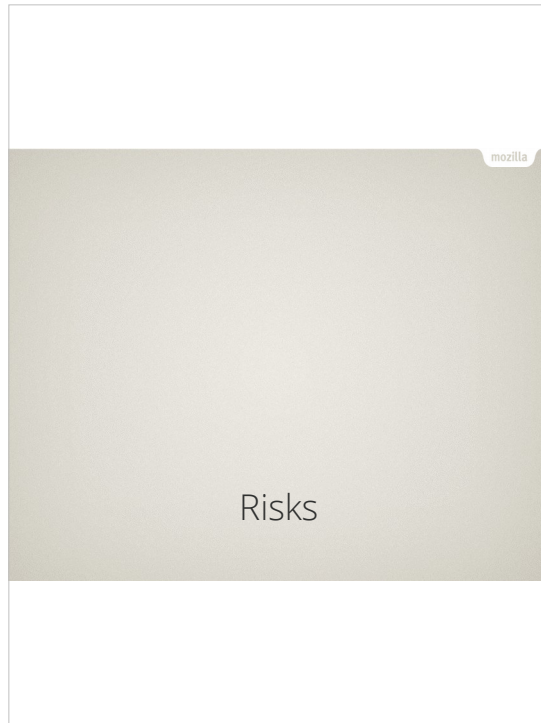
The cloud allows the development of new and useful services, either for developers by abstracting away a lot of low-level drudgery, to offering reliability and flexibility. Users too get to benefit from more and better organized information packaged in innovative ways.



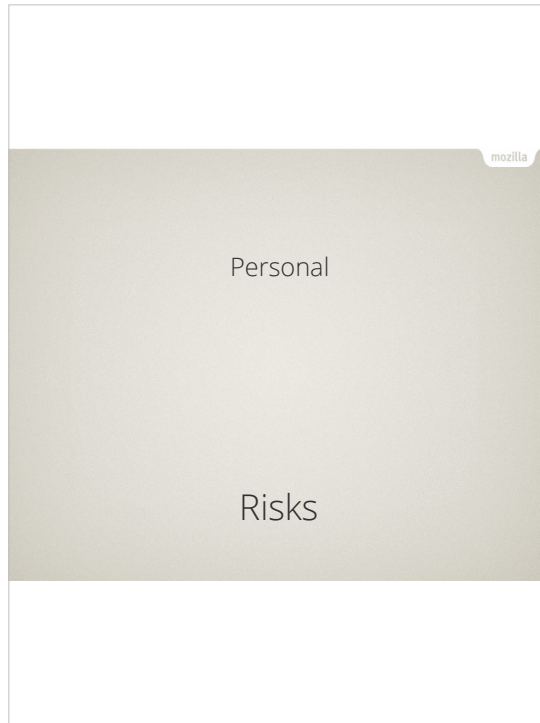
Because of these new services, cloud also offers us new forms of expression, new tools to communicate and new ways to interact.



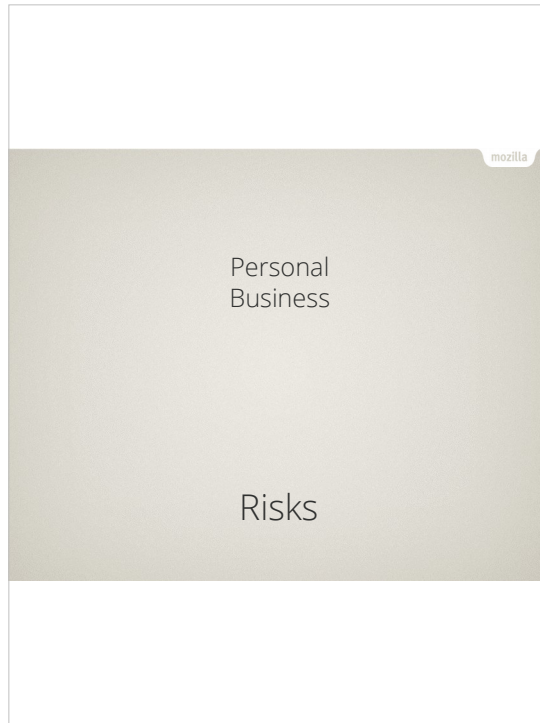
As a matter of economics too, it allows the elimination of intermediaries that stand between the production of a product and its actual delivery to a customer. Cloud, as the new evolution of the internet, allows for easier matching of buyers and sellers, for discoverability.



But there are also risks.



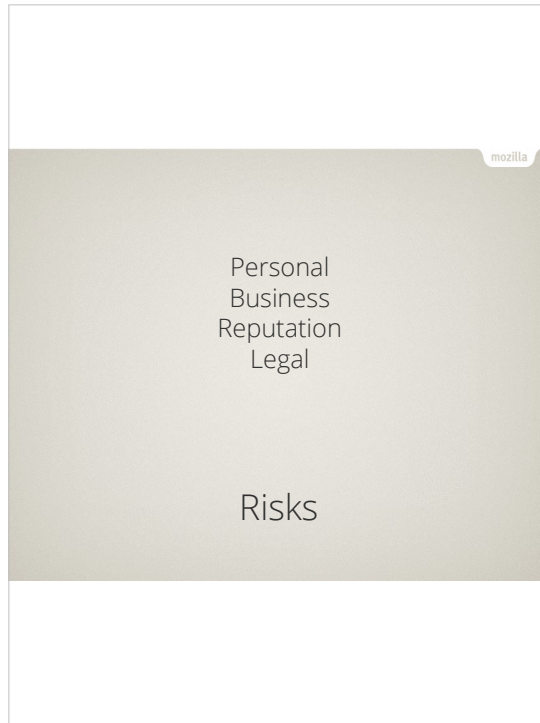
There are risks to the persons whose data you are holding. Data about people is power over them, mishandling data has the potential to harm people.



There are risks to businesses who keep their data in the cloud and whose business depends on these “other people's computers”.



There are risks to the reputation of your company which are hard to overcome. You can recover from a bad performance, but much harder from a big reputation hit which may be caused by a significant data breach or unethnical data practices.



And there are also legal risks. People that get harmed by your mishandling of data will use all the means at their disposal to get recourse and in many jurisdiction they can sue you. There are also regulations you have to worry about.

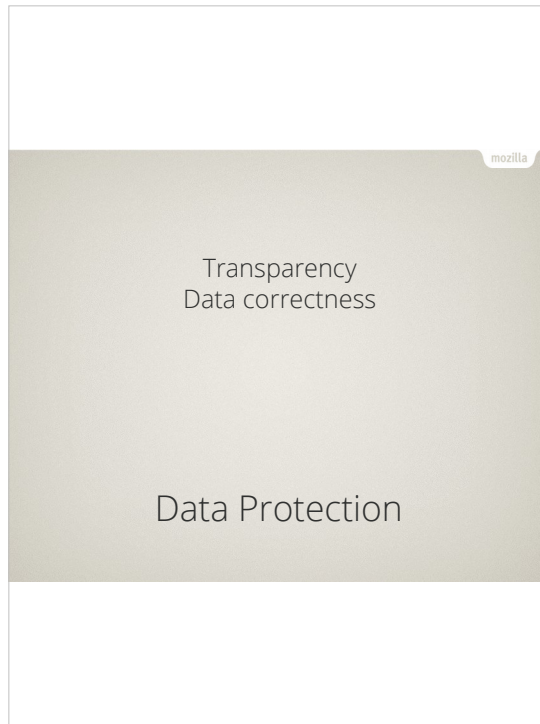


Speaking of regulations, in Europe we do have a European Data Protection statute and pan-European organization dedicated to these issues.



If you collect, store and process personal data in some way, you may be required to adhere to some principles:

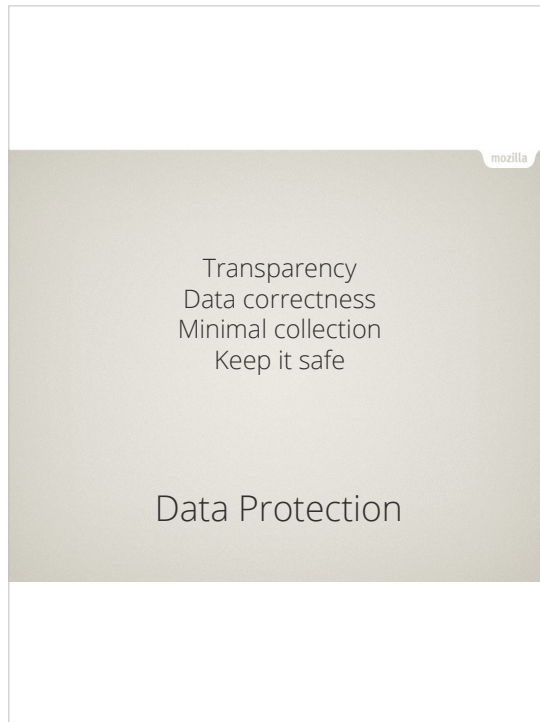
- notify users about the data collected



Ensure it is up to date and correct; if you collect it you should at least ensure it's correct. This matters for cases where the accuracy of data can impact people's ability to get a loan or insurance.



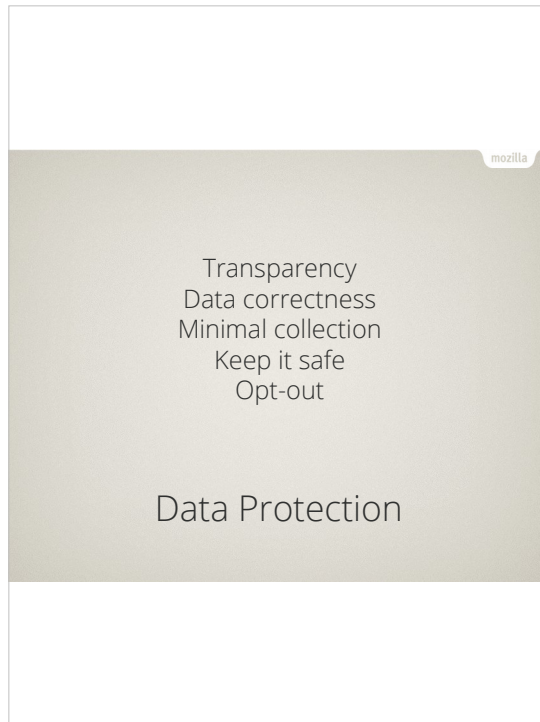
The collection must be minimal in time and space and data should be kept for no longer than necessary.



Keep it safe and secure. That should go without saying, but even now we have many cases in the news of large organizations or governments regularly losing data.

Examples:

- Ashley Madison dating website whose data breach reportedly led to divorce and suicide
- Gawker media data breach which exposed it as a very careless organization (they stored passwords in plaintext)
- US retailer that went data mining and discovered sensitive information about customers (being pregnant) and accidentally exposed them through marketing coupons



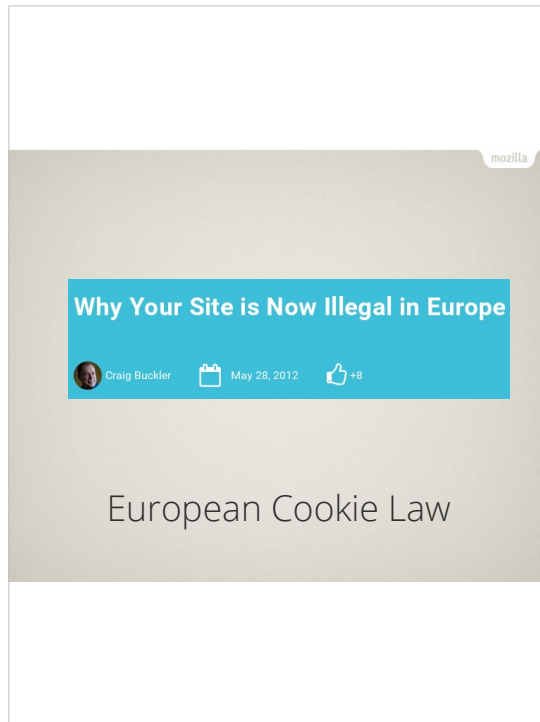
And most importantly, give users the right to delete their own data from your system. We cannot have a healthy relationship with someone if we don't have the freedom to get out of it. That may be difficult if you don't have a personal data handling policy.

Example: Facebook Ireland user who sued Facebook (because Facebook is based in Ireland – for tax reasons) in order to get his personal data out of the system. After a process that dragged out for years and no doubt cost Facebook a great deal, they had to submit to the law. The good thing about this is that now Facebook has a streamlined process for being transparent with users and they also have an account delete function that also (at least reportedly) deletes your data from their system.

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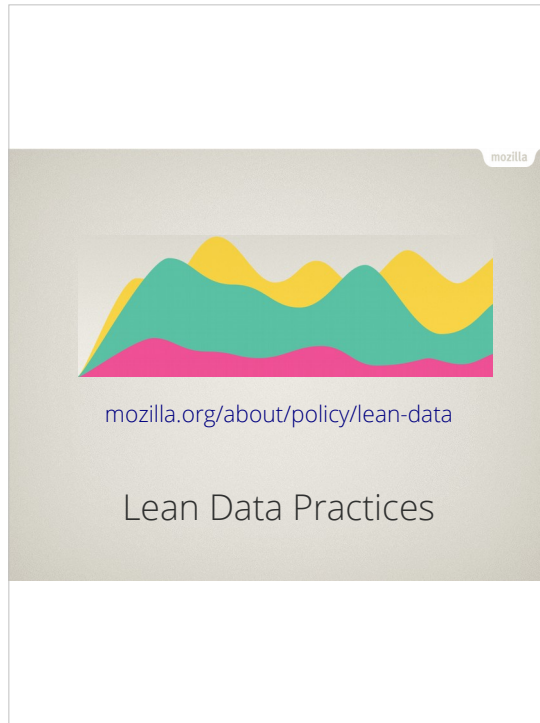
Transparency
Data correctness
Minimal collection
Keep it safe
Opt-out
Neural nets?

Data Protection



That is already enshrined into law and we should expect more of these regulations to come, including the infamous “EU cookie law” which asserts an even stronger right of a user to opt in for data collection rather than having to opt out.

These laws are not accidental, they represent a genuine desire in society for data protection, with the growing realization that data has the potential to do harm. While the political process is not the most efficient means to convey these ideas, they are growing to be a reflection of at least some concerns.



To help you in your quest to understand data practices, Mozilla has a few it has developed for itself and it's a place you can begin.



And so, we have to remember this isn't just a computer.



It's part of you. We need to use, emit and receive data to live in this new digital world. As persons we are expanding our social, business and physical environment. We are not "digital persons", we are just persons who happen to need these new tools. Not everyone is a willing participant and soon nobody will be, they will need to use digital mobile devices and cloud to do their jobs, their taxes and to interact with fellow humans.



An internet, not a minefield

So let's build an internet and not a minefield.



A space that's safe for people is one that we can rely on for growth. A hostile space will continue to be hobbled by regulation. People behave differently under hostile condition, they will grudgingly use it for as long as they need and no more. They will lie to you and see you as their enemy.

We want the internet to be an actual social medium, not just a tool, neat as it is already.

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Comments, questions?