

Data Driven Government

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OPEN KNOWLEDGE

CIPIL

CENTRE FOR INTELLECTUAL PROPERTY & INFORMATION LAW



**UNIVERSITY OF
CAMBRIDGE**

About Me

Researcher, Technologist & Social Entrepreneur
Expert on openness & digital transformation

Saving £4m in 15 minutes

<http://opendatahandbook.org/value-stories/en/saving-4-million-pounds-in-15-minutes/>



UK Departmental Spending

Search

About

Visualisations ▾

gartner

Time	From	To	Amount	
2011	Cabinet Office	GARTNER GROUP UK LTD	£61,680.00	details»
2012	MCA	GARTNER U.K. LIMITED	£17,280.00	details»
2011	HM Treasury	GARTNER GROUP UK LTD	£33,960.00	details»
2012	Ordnance Survey	act*gartner crm	£1,730.63	details»
2011	Ordnance Survey	GARTNER U.K. LIMITED	£45,045.00	details»
2012	NHS Blood and Transplant	GARTNER U.K. LIMITED	£101,000.00	details»
2010	Cabinet Office	GARTNER GROUP UK LTD	£51,400.00	details»
2011	Ordnance Survey	GARTNER U.K. LIMITED	£39,227.00	details»
2011	Ordnance Survey	GARTNER U.K. LIMITED	£3,673.00	details»
2010	Ordnance Survey	GARTNER U.K. LIMITED	£2,942.71	details»
2011	NHS Blood and Transplant	GARTNER U.K. LIMITED	£71,900.00	details»
2010	Stockton on Tees Teaching PCT	GARTNER AND PARTNERS	£52,969.27	details»

Department Family

- 30 [Department of Health](#)
- 11 [Department of Communities & Local Government](#)
- 11 [Home Office](#)
- 8 [Department for Business, Innovation and Skills](#)
- 8 [Department For Transport](#)
- 7 [Department for Work and Pensions](#)
- 6 [HM Revenue and Customs](#)
- 4 [\(Emotv\)](#)

Supplier

- 75 [GARTNER U.K. LIMITED](#)
- 9 [GARTNER AND PARTNERS](#)
- 6 [GARTNER GROUP](#)
- 6 [GARTNER GROUP UK LTD](#)

Lessons

- Unexpected and unpredictable needs and uses
- Insights are small and many - long tail
- Distributed and bottom-up generation of ideas and needs
- Info flow often poor
- Lots of friction - getting and combining data is hard
 - lack of common identifiers, different formats etc
- Not a lack of IT - but maybe not the right kind
 - Gov had an expensive budgeting system

Some Principles

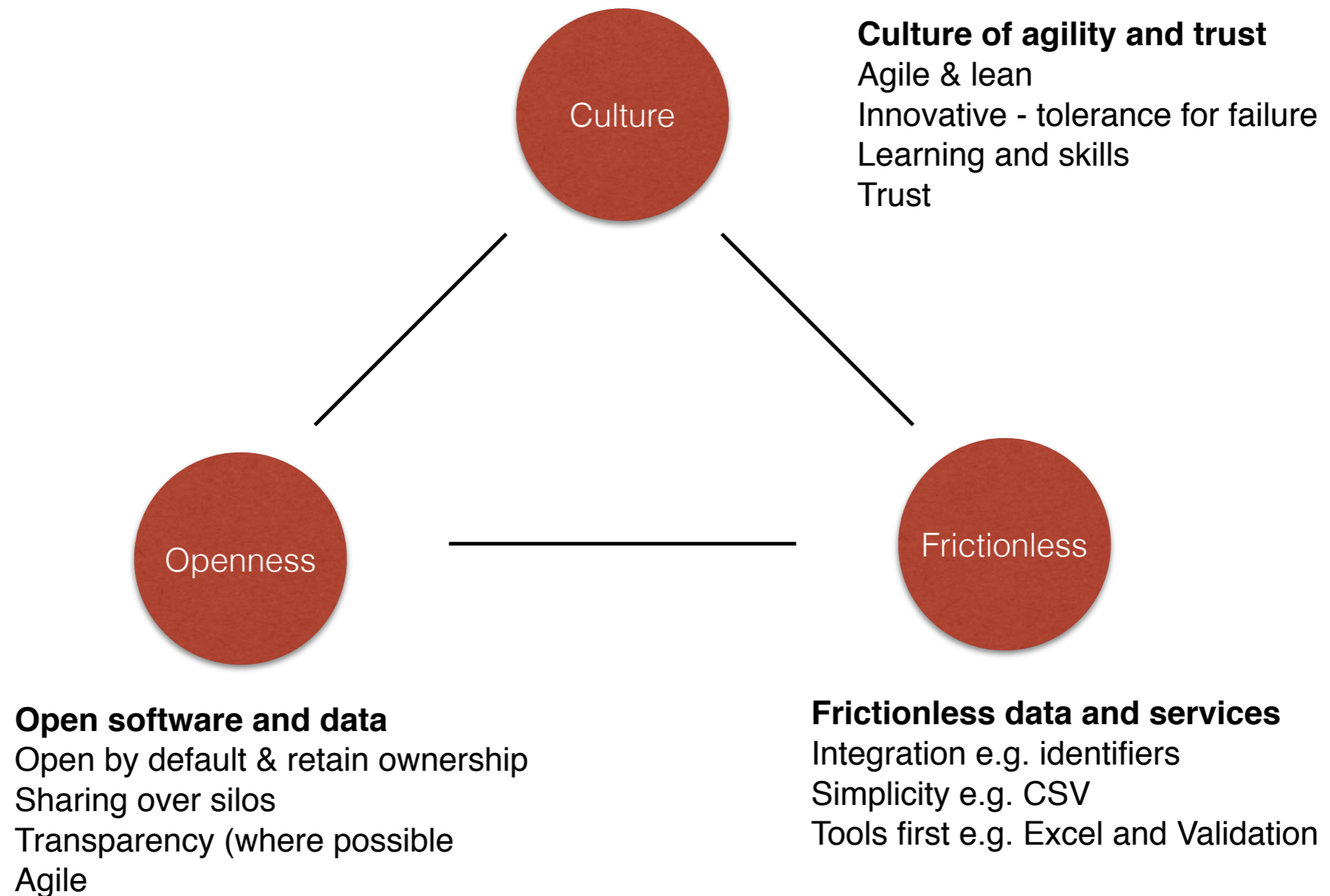
Simplicity

Openness

Agility

Processes over solutions

3 Pillars



Concrete Suggestions

You can only procure
what you know!

How you buy determines
what you get

Principles for Buying

- **Agile and lean:** you probably don't know what you need - at least in the long term so move away from spec and deliver
- **Open:** explicitly favour open software and open data in procurement
 - Where open not possible (e.g. personal data) insist on ownership or equivalent license
- **Oversee and design** - not necessarily implement
 - Hire people to buy and oversee. Product managers, product owners, lead coders / technical architects - do not build your own startup!
- **Open offsets** - pay for the open source you are using on an ongoing basis
 - Focus on use not requirements and track use
- **Train insight teams** - policy expert + data wrangler + coder (?)
 - Can hire in

Nature of Software

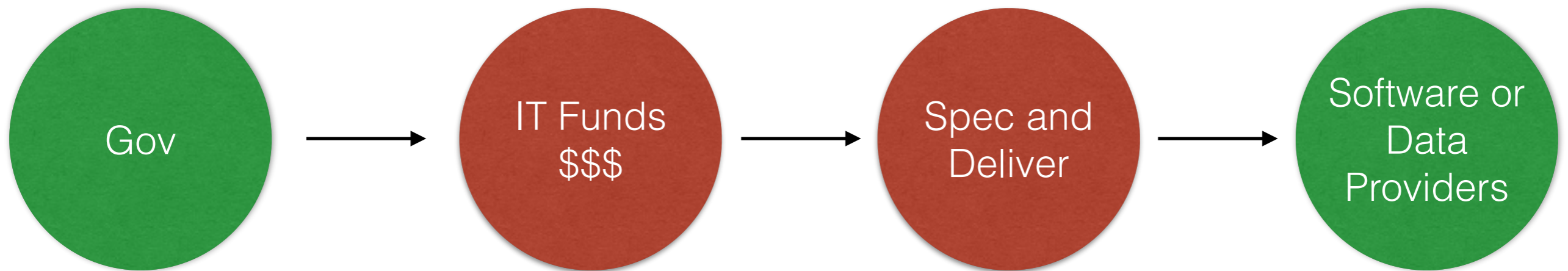
<http://rufuspollock.org/open-source-software-and-government/>

- Software is different from chairs or bridges. High fixed / low marginal cost. Incremental.
- Switching costs are significant: it is (increasingly) costly to switch off a given piece of software once you start using it.
- The future matters and is difficult to know
- Governments are bad at negotiating, especially in this environment, and hence the lock-in problem is especially acute for Government

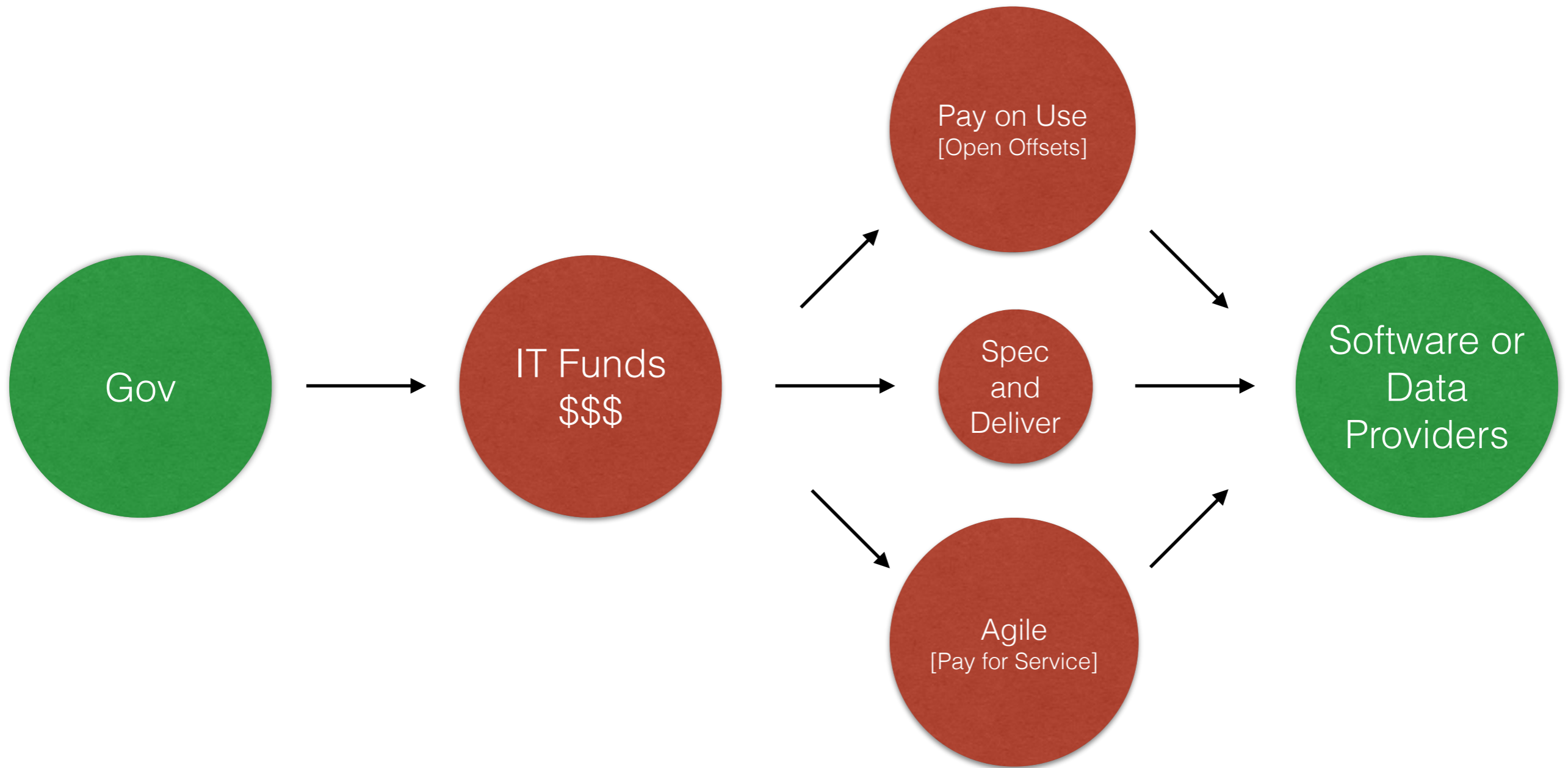
Buying software is not like buying chairs

Do not trust your friendly ~~crack~~ software-dealer

Current Model



New Model



Agile and Lean

- **Software is different from chairs or bridges. High fixed / low marginal cost. Incremental. Customizable.**
- Service delivery framework contracts
 - Make it very easy to join esp for SMEs
- Open only
 - or make it very hard to have closed software
 - Watch out for lock-in to third party proprietary components
- Make sure you have the staff in place to run the process
 - e.g. agile without a client representative does not work well

Open Offsets

The Heartbleed Bug

The Heartbleed Bug is a serious vulnerability in the popular OpenSSL cryptographic software library. This weakness allows stealing the information protected, under normal conditions, by the SSL/TLS encryption used to secure the Internet. SSL/TLS provides communication security and privacy over the Internet for applications such as web, email, instant messaging (IM) and some virtual private networks (VPNs).

The Heartbleed bug allows anyone on the Internet to read the memory of the systems protected by the vulnerable versions of the OpenSSL software. This compromises the secret keys used to identify the service providers and to encrypt the traffic, the names and passwords of the users and the actual content. This allows attackers to eavesdrop on communications, steal data directly from the services and users and to impersonate services and users.



- Pay for the open information you use in your stack
- Start tracking use
- Creates a sustainable business model for open
- Can scale beyond you e.g. business, other funders, other gobs

Conclusion

~~Data~~
Insight
Driven Government

Data => Insight
&
Insight => Action

Build Processes rather than Solutions

{you don't know what you want}

{and if you think you do know, you are probably mistaken}

How you Buy Determines
What You Get