

Idox Elections

Future of Electronic Voting – The First Principles

The University of Edinburgh

29 November 2017

@IdoxElections

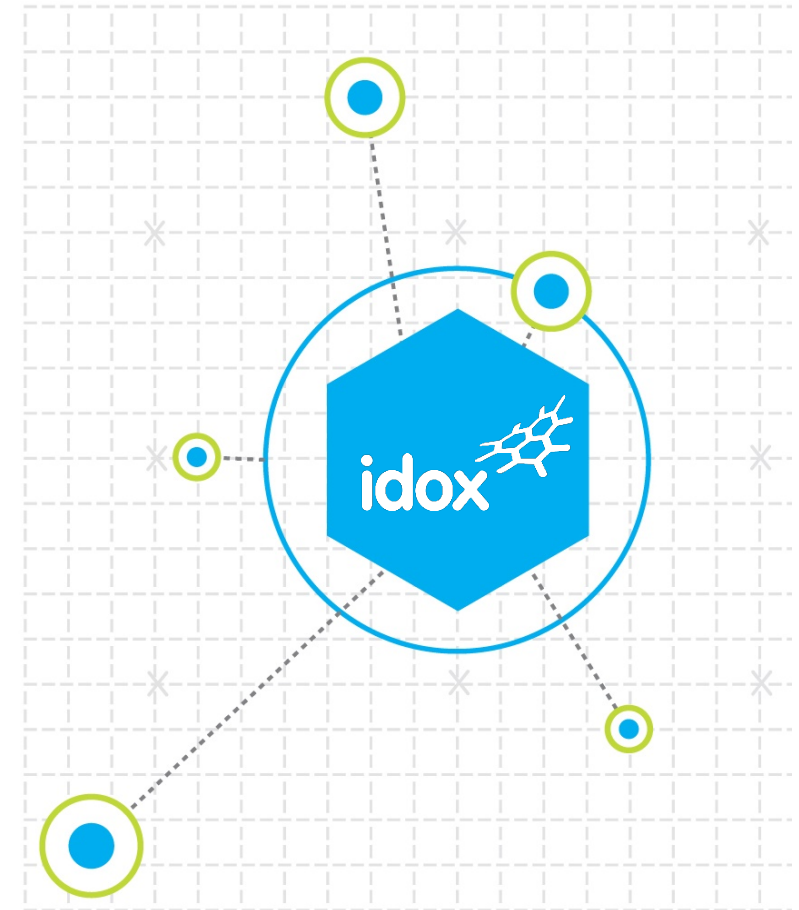
Agenda

- Brief introduction to Idox
- Why eVoting is hard and some solutions
- Questions



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Where we operate



Our offices

United Kingdom

Burton on Trent, UK
Cambridge, UK
Derry, N.Ireland
Glasgow, UK
Liverpool, UK
London, UK
Manchester, UK
Theale, UK
Woodcote, UK

Europe

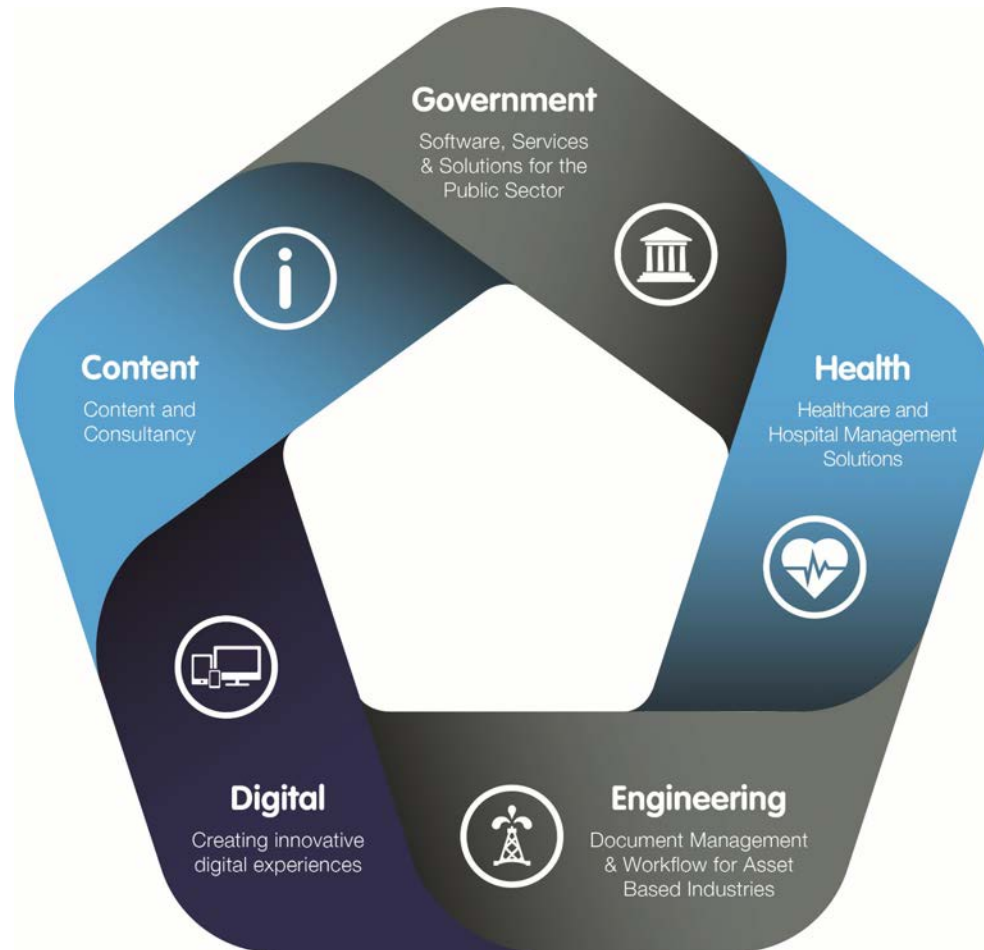
Berlin, Germany
Brussels, Belgium
Birkirkara, Malta
Goor, Holland
Limerick, Ireland
Paris, France
Rennes, France
Skopje, Macedonia
Utrecht, Holland

Rest of the World

Houston, USA
Pune, India



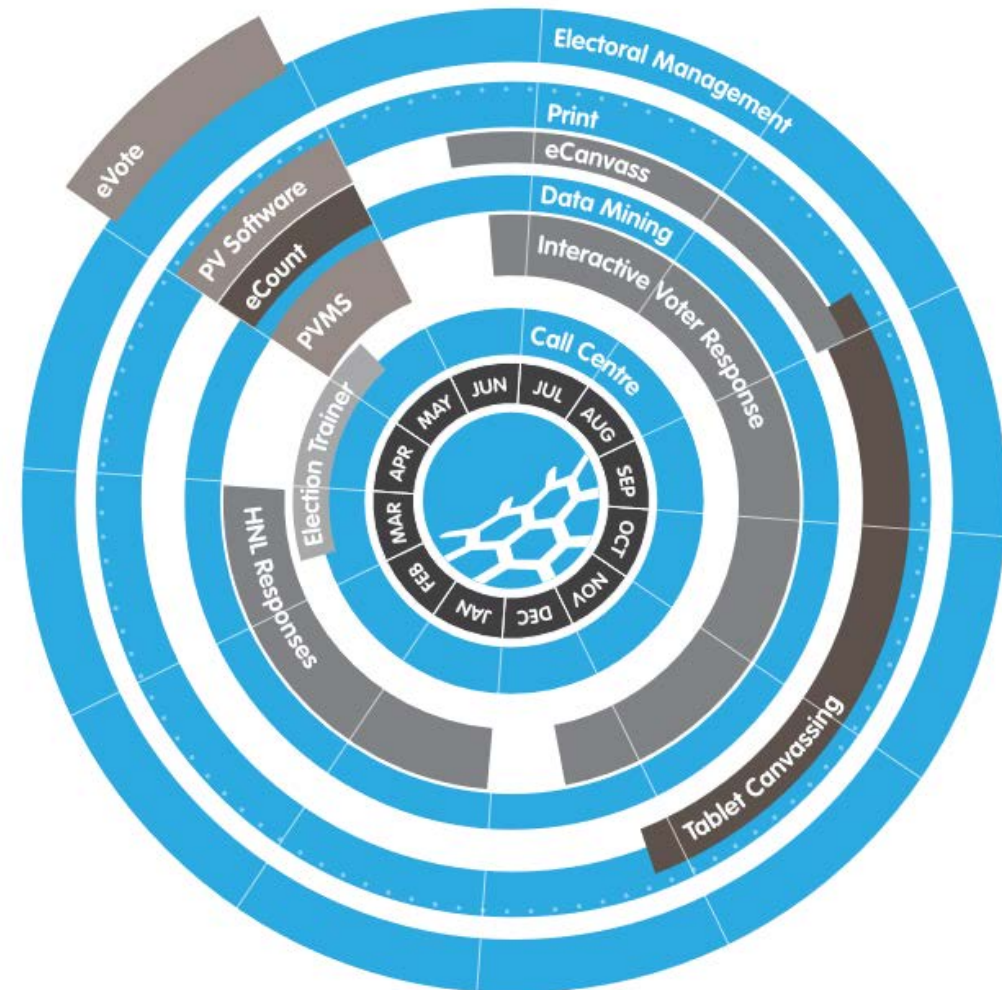
Our sectors



750+ public
sector
customers in
the UK

Supporting democracy, 360 degrees

From print to PVMS,
from canvass tablets to
call centre solutions,
from electronic
counting to electoral
data mining, we've got
elections covered



CGI and Idox partnered to deliver Scotland eCount



In May 2017, Idox supplied an effective eCounting system to the Scottish Government for the second time.

The system successfully supported all 32 Scottish councils taking part in the local government election under the country's Single Transferable Vote (STV) system.

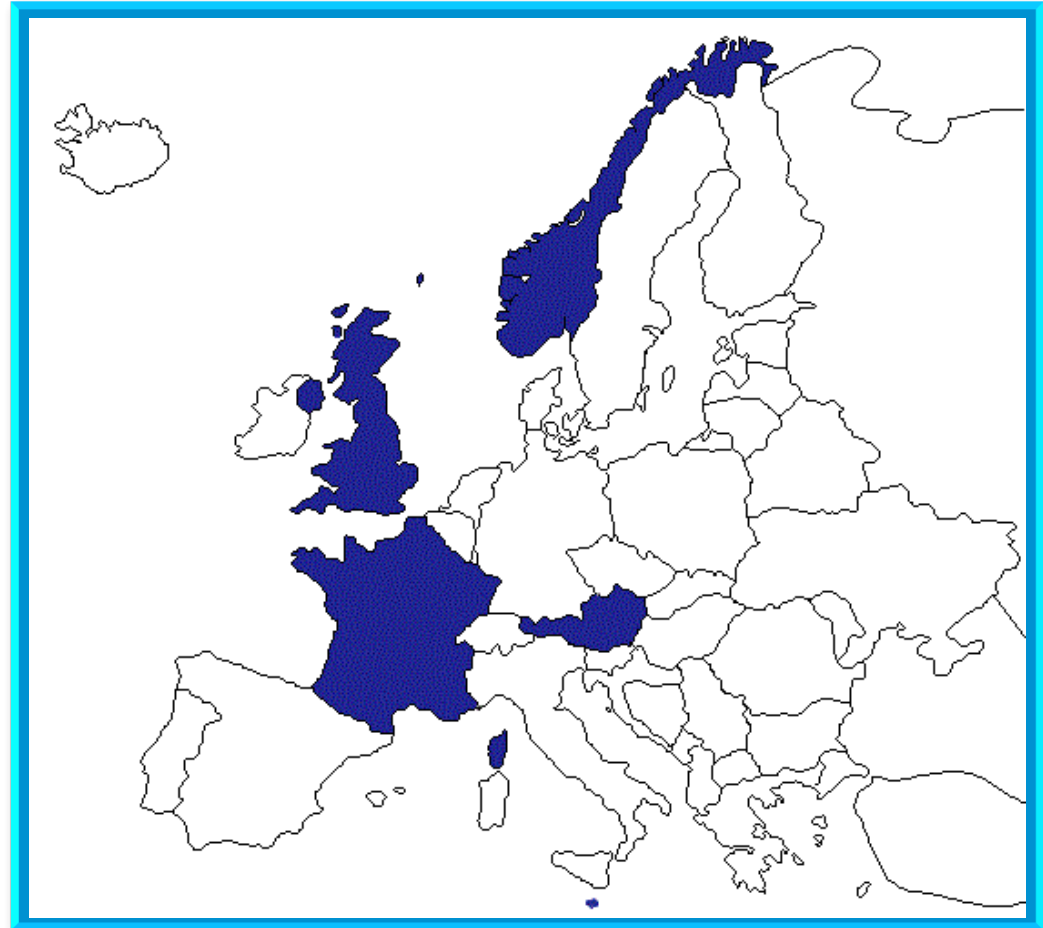


Idox is a chosen partner to deliver Scottish Local Government elections and by-elections until 2021.



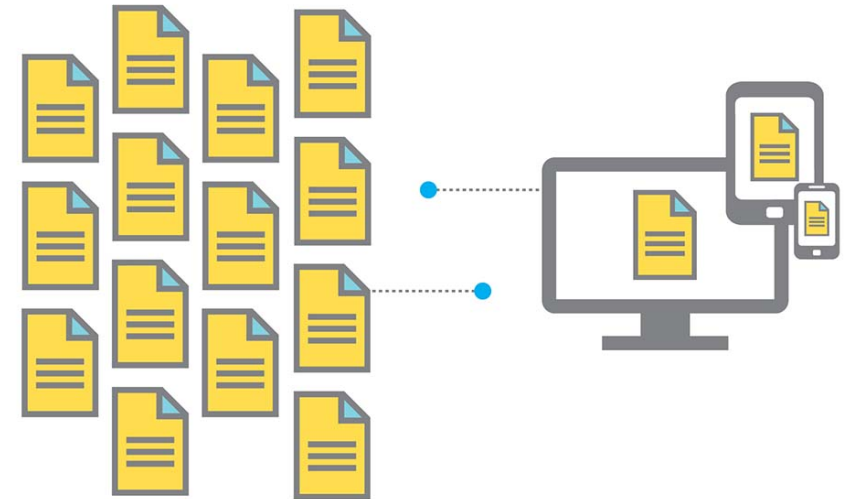
Our national and international elections footprint

- **All parts of the UK:**
 - Scotland
 - England
 - Wales
 - Northern Ireland
- **Across Europe:**
 - Norway – France
 - Austria – Malta



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Manual voting: the early days

The County Election
George Caleb Bingham
1852



Why eVoting is difficult



PRIVACY

No-one else
knows how you
voted



VERIFIABILITY

Cast-as-intended;
recorded-as-cast;
counted-as-
recorded



ACCOUNTABILITY

Misbehaving
parties can be
singled out



COERCION RESISTANCE

No-one can force
or bribe you to
vote a certain way

Verifiable but not private ...



Some solutions...



Poll card – Online vote – SMS return code
(Vote as many times as you like; last one counts)



Voter verifiable audit trail

Conclusion

- Electronic voting is hard
- 150 years ago, manual voting was flawed – we've learnt lessons and refined it over time
- The same can and should be done with electronic voting



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Questions





Thanks for listening ...

For more information, please visit: www.idoxgroup.com/elections

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