

Doing research on data uses, needs & capabilities with local authorities

Transcript from webinar video recording

1

00:00:00,765 --> 00:00:03,572

Welcome again to this webinar.

2

00:00:03,672 --> 00:00:05,531

And, as I was saying,

3

00:00:06,024 --> 00:00:08,631

we're both based at the Urban Big Data Centre

4

00:00:08,998 --> 00:00:14,044

and, really, we're coming from a sociology/social science perspective

5

00:00:14,144 --> 00:00:18,490

on this topic of researching data uses, needs, and capabilities

6

00:00:18,847 --> 00:00:20,424

by local authorities.

7

00:00:20,751 --> 00:00:22,520

So, based at the Urban Big Data Centre,

8

00:00:22,620 --> 00:00:26,269

which combines social science with data science.

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00:00:26,436 --> 00:00:29,956

But here today, we're really going to bring the social science perspective

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00:00:30,475 --> 00:00:31,893

to this topic.

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00:00:32,763 --> 00:00:36,495

So, to get us started and warm up a little bit

12

00:00:36,665 --> 00:00:38,123

on this broad topic,

13

00:00:38,223 --> 00:00:43,849

I would like to do a little round of Mentimeter

14

00:00:43,949 --> 00:00:46,290

which I'm sure you have engaged with before.

15

00:00:46,390 --> 00:00:49,551

If not, I'm just going to guide you on how to do that.

16

00:00:49,851 --> 00:00:53,533

So, I'm going to stop sharing my screen and share the other screen,

17

00:00:53,633 --> 00:00:55,075

if it's okay with you.

18

00:00:55,613 --> 00:00:58,094

So, it's really a way of warming up

19

00:00:58,194 --> 00:01:02,815

and starting to engage with the topic.

20

00:01:03,107 --> 00:01:05,466

So, hopefully you will...

21

00:01:05,566 --> 00:01:09,327

Please let me know using the chat or even on your mic

22

00:01:09,427 --> 00:01:12,269

if you can't see my screen, you can't hear me,

23

00:01:12,369 --> 00:01:15,280

or if there are any problems with the Mentimeter.

24

00:01:15,480 --> 00:01:20,111

But you just go onto www.menti.com

25

00:01:20,211 --> 00:01:23,393

and then you will be prompted to put a code,

26

00:01:23,493 --> 00:01:27,510

which is appearing now on the screen and you should see it.

27

00:01:27,610 --> 00:01:31,608

It's 3-6-8-6-8-0-7-8.

28

00:01:31,858 --> 00:01:34,666

And the first question today is,

29

00:01:34,783 --> 00:01:39,197

what types of data do you think local government produce and use?

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00:01:39,297 --> 00:01:41,114

And I know it's a very broad question.

31

00:01:41,404 --> 00:01:45,761

And it's just to get us started and warmed up a bit around this topic.

32

00:01:45,861 --> 00:01:50,068

So, I will let you get... Yeah, exactly, perfect.

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00:01:50,168 --> 00:01:55,865

And we see the answers popping up on the word cloud on the screen.

34

00:01:56,532 --> 00:02:01,099

And that should be an interesting exercise.

35

00:02:15,774 --> 00:02:18,941

So, we've quite a number of possibles. I'm going to give it some time.

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00:02:32,146 --> 00:02:33,513

Any more that...Yeah.

37

00:02:43,918 --> 00:02:47,986

So, we have survey data that is coming out strongly.

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00:02:48,383 --> 00:02:50,209

A wide range of other data

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00:02:50,593 --> 00:02:54,540

that are all related to local government.

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00:02:55,430 --> 00:02:56,666

So, yeah.

41

00:02:57,746 --> 00:03:01,082

Social demographics data. Such as age, gender.

42

00:03:04,293 --> 00:03:09,072

Quantitative data but also qualitative data with interview data.

43

00:03:09,541 --> 00:03:11,200

Spatial, that's a different type of data.

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00:03:11,300 --> 00:03:13,019

Spatial data as well.

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00:03:14,029 --> 00:03:15,678

Council tax, homelessness, yeah.

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00:03:17,237 --> 00:03:18,403

Really interesting.

47

00:03:18,503 --> 00:03:19,812

Census data.

48

00:03:20,644 --> 00:03:21,968

Yeah. So, using this.

49

00:03:22,869 --> 00:03:27,500

So, obviously, continue to put in/fill in if you haven't done so.

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00:03:27,600 --> 00:03:32,058

But I think it really shows the wide range of data

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00:03:32,158 --> 00:03:36,026

that local government use and that,

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00:03:36,584 --> 00:03:38,081

for instance, census data,

53

00:03:38,210 --> 00:03:40,847

and that local government also produce.

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00:03:41,315 --> 00:03:44,613

So, data around housing occupancy,

55

00:03:44,742 --> 00:03:45,989

road network, yeah.

56

00:03:48,020 --> 00:03:50,758

Transportation, council taxes, all of this.

57

00:03:51,843 --> 00:03:54,644

Fantastic. So, hopefully this gives you, like,

58

00:03:54,744 --> 00:03:58,829

it really warms you up for this webinar

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00:03:59,297 --> 00:04:03,044

and gives us, already, a good overview of

60

00:04:03,144 --> 00:04:06,273

the complexity of this topic.

61

00:04:06,703 --> 00:04:08,461

Okay. So, now I'm going to move,

62

00:04:08,710 --> 00:04:10,788

hopefully, to the next question.

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00:04:11,375 --> 00:04:13,943

And you should be prompted with a question now,

64

00:04:14,043 --> 00:04:16,422

which I will bring up onto the screen.

65

00:04:17,002 --> 00:04:18,280

Same code.

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00:04:22,169 --> 00:04:27,278

So, what do you think are the challenges of doing research on data

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00:04:27,378 --> 00:04:29,366

with local authorities?

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00:04:29,466 --> 00:04:31,774

It's a very open question

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00:04:33,019 --> 00:04:39,458

so I'm curious to see what challenges you think are there

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00:04:39,558 --> 00:04:42,937

when we start thinking about doing research on data with local authorities.

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00:04:43,196 --> 00:04:44,734

Please let me know if

72

00:04:46,310 --> 00:04:49,868

it works with Mentimeter, but it should be okay.

73

00:04:52,567 --> 00:04:54,725

Yeah, it's also started arriving.

74

00:05:00,335 --> 00:05:03,603

So, I can see now authenticity of data,

75

00:05:04,689 --> 00:05:06,307

some data gaps,

76

00:05:07,555 --> 00:05:08,870

licensed data, bias, yeah.

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00:05:08,970 --> 00:05:13,508

So, some more of, like, the technical infrastructure of data

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00:05:13,608 --> 00:05:17,372

but also, kind of, broader governance issues

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00:05:17,810 --> 00:05:20,558

emerging here, like politics, I guess.

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00:05:22,306 --> 00:05:23,524

Not matching boundaries.

81

00:05:23,624 --> 00:05:26,872

That can be with data but also within local government, I guess.

82

00:05:27,392 --> 00:05:28,932

Timescales, yeah.

83

00:05:30,282 --> 00:05:34,100

Skills is also a very important one that is emerging here, yeah.

84

00:05:36,270 --> 00:05:39,684

Just leaving some more time for people to engage.

85

00:05:46,163 --> 00:05:51,343

Not open access is also an important challenge

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00:05:51,443 --> 00:05:52,822

that you can encounter

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00:05:52,922 --> 00:05:55,934

doing research with local authorities here.

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00:06:00,814 --> 00:06:02,231

Anything else?

89

00:06:15,507 --> 00:06:17,111

Okay. We'll leave it for one more minute

90

00:06:17,211 --> 00:06:19,598

and then we'll be moving on.

91

00:06:20,115 --> 00:06:21,753

Lack of consistency.

92

00:06:23,614 --> 00:06:25,430

Access to data, yeah.

93

00:06:25,601 --> 00:06:27,489

So, I think it's obviously

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00:06:29,096 --> 00:06:31,384

a similar topic to not open data.

95

00:06:31,484 --> 00:06:33,242

Access, lack of data, yeah.

96

00:06:34,211 --> 00:06:35,294

Access.

97

00:06:35,975 --> 00:06:40,832

So, I think we have here a good overview of some of

98

00:06:40,932 --> 00:06:45,256

the technical infrastructure issues

99

00:06:45,356 --> 00:06:46,563

around the data itself.

100

00:06:46,663 --> 00:06:50,827

Access, its quality, consistency, where it's located, its ownership.

101

00:06:50,927 --> 00:06:54,155

But also, maybe, broader issues and challenges

102

00:06:54,255 --> 00:07:00,042

around governance and timescale of local government,

103

00:07:00,142 --> 00:07:01,748

politics of local governments.

104

00:07:02,619 --> 00:07:07,347

The skills, the data skills, also, that are available to local governments.

105

00:07:07,447 --> 00:07:08,462

So, all of this.

106

00:07:08,562 --> 00:07:12,140

GDPR, that's the legal framework as well.

107

00:07:12,436 --> 00:07:15,382

So, really, this really captures well

108

00:07:16,036 --> 00:07:19,174

the variety of challenges,

109

00:07:19,274 --> 00:07:23,200

but also opportunities when you're doing research with local authorities

110

00:07:23,300 --> 00:07:24,773

to engage with these challenges

111

00:07:24,873 --> 00:07:29,450

and hopefully try to solve them

112

00:07:29,550 --> 00:07:32,553

or resolve them, at least, as much as possible.

113

00:07:32,693 --> 00:07:34,559

Okay. So, I'm going to stop sharing this

114

00:07:34,659 --> 00:07:38,315

and hopefully this has given us some food for thought.

115

00:07:38,415 --> 00:07:41,651

And I'm just going to share, again, the presentation.

116

00:07:42,163 --> 00:07:44,781

Okay. So, the structure of the webinar.

117

00:07:45,494 --> 00:07:49,350

The training webinar today will be around four discussion points.

118

00:07:49,450 --> 00:07:52,728

I think the understanding the landscape of local government

119

00:07:53,127 --> 00:07:55,809

and its different data uses,

120

00:07:55,909 --> 00:07:59,238

and I think that's really important to get started with.

121

00:08:00,297 --> 00:08:02,495

Doing research on data uses, needs, and capabilities

122

00:08:02,595 --> 00:08:06,130

with local authorities is really understanding the context in which

123

00:08:06,230 --> 00:08:09,009

those uses and needs are located.

124

00:08:09,578 --> 00:08:12,175

Then we're going to get into more details around

125

00:08:12,275 --> 00:08:14,921

how do we map the different data types

126

00:08:15,118 --> 00:08:19,528

that a local government uses and produces,

127

00:08:19,675 --> 00:08:22,562

and also the different areas of data engagement.

128

00:08:22,662 --> 00:08:27,297

And hopefully you will know more about that by the end of the webinar.

129

00:08:27,586 --> 00:08:31,854

Then we will look at designing a mixed-methods approach

130

00:08:32,451 --> 00:08:36,950

to doing research on data uses, needs, and capabilities with local authorities

131

00:08:37,199 --> 00:08:39,979

and combining qualitative research methods

132

00:08:40,079 --> 00:08:41,773

with quantitative research methods.

133

00:08:42,363 --> 00:08:45,072

And finally, we will look at

134

00:08:45,200 --> 00:08:48,919

collaboration and its essential role

135

00:08:49,609 --> 00:08:53,677

in the project we run, as I was mentioning earlier,

136

00:08:54,456 --> 00:08:57,552

with the Digital Office for Scottish local government

137

00:08:57,652 --> 00:09:01,619

on Scottish local authorities' data engagement during COVID-19.

138

00:09:01,719 --> 00:09:04,258

So, that's the project I'm running myself,

139

00:09:04,839 --> 00:09:06,874

we've been running for the last year.

140

00:09:06,974 --> 00:09:09,013

So, you can see at the bottom of the screen

141

00:09:09,113 --> 00:09:12,266

there's a link to the full report if you're interested in it.

142

00:09:12,446 --> 00:09:16,522

And I will share the slides as well at the end anyway.

143

00:09:16,693 --> 00:09:19,970

So, these are going to be the four discussion points of

144

00:09:20,070 --> 00:09:22,068

the webinar today.

145

00:09:22,313 --> 00:09:24,741

Please let me know if you have any questions using either

146

00:09:24,841 --> 00:09:27,590

the chat function or raising your hand

147

00:09:27,690 --> 00:09:29,910

and I will also give you some opportunities to engage

148

00:09:30,352 --> 00:09:32,021

during the webinar.

149

00:09:33,090 --> 00:09:37,560

So, starting with understanding the landscape of local government

150

00:09:37,660 --> 00:09:39,120

and its data uses,

151

00:09:39,430 --> 00:09:41,608

I think what is really important here to remember,

152

00:09:41,708 --> 00:09:43,175

and I'm sure you're aware of this,

153

00:09:43,275 --> 00:09:47,263

local government has a very complex organisational structure.

154

00:09:47,569 --> 00:09:50,227

And it also has a breadth of policy areas

155

00:09:50,327 --> 00:09:54,276

and delivers a wide range of services.

156

00:09:54,615 --> 00:09:57,162

So, here, I've just put on the right

157

00:09:57,262 --> 00:10:01,007

a table that summarises the main areas of responsibility of

158

00:10:01,107 --> 00:10:03,166

local authorities in Scotland

159

00:10:03,384 --> 00:10:05,810

and it really gives you an understanding of

160

00:10:05,910 --> 00:10:10,129

the wide range of policy areas they are dealing with.

161

00:10:10,448 --> 00:10:13,337

So, education, social care, environmental protection,

162

00:10:13,537 --> 00:10:16,885

road and transport, economic development,

163

00:10:16,943 --> 00:10:19,302

housing and planning, waste management,

164

00:10:19,611 --> 00:10:21,949

and cultural and leisure services.

165

00:10:22,049 --> 00:10:23,565

So, if you think in terms of data

166

00:10:23,665 --> 00:10:27,503

and the data they collect in each of these areas of responsibility,

167

00:10:27,603 --> 00:10:32,593

you can quickly see how varied this is going to be.

168

00:10:35,183 --> 00:10:39,133

And this complex organisational structure of

169

00:10:39,233 --> 00:10:42,142

local government and the range of services they deliver is

170

00:10:42,242 --> 00:10:46,716

also topped by the fact that they engage, obviously, with,

171

00:10:47,136 --> 00:10:49,494

first of all, other public sector organisations

172

00:10:49,669 --> 00:10:53,058

like Police Scotland or NHS bodies and share data with them.

173

00:10:53,396 --> 00:10:57,075

There are also other entities such as third sector organisations

174

00:10:57,175 --> 00:10:58,583

and private companies.

175

00:10:59,044 --> 00:11:04,319

And all of this is kind of embedded within an ecosystem of organisations

176

00:11:04,419 --> 00:11:06,583

at national and local levels.

177

00:11:06,731 --> 00:11:08,230

So, for example, in terms of

178

00:11:08,330 --> 00:11:10,548

digital transformation in local government,

179

00:11:10,754 --> 00:11:13,837

the Improvement Service and Digital Office for

180

00:11:13,937 --> 00:11:19,882

Scottish local government are really two key local government organisations

181

00:11:19,982 --> 00:11:21,731

that are active in that field.

182

00:11:21,831 --> 00:11:25,789

So, they are also supporting local government with data sharing.

183

00:11:25,889 --> 00:11:29,332

And I think when you are looking at doing research on this topic,

184

00:11:29,432 --> 00:11:32,461

it's very important to look at these organisations as well.

185

00:11:33,922 --> 00:11:38,043

So, this is more on the understanding of the landscape of local government

186

00:11:38,143 --> 00:11:41,931

when it comes to digital and digital transformation.

187

00:11:42,235 --> 00:11:46,363

But also, it's kind of important to look at the different types of

188

00:11:46,463 --> 00:11:49,111

data activities that local government are

189

00:11:49,211 --> 00:11:51,151

doing on a daily basis.

190

00:11:51,249 --> 00:11:54,037

And here it's quite useful to look at

191

00:11:54,137 --> 00:11:58,586

the diagram that I've collected from

192

00:11:58,686 --> 00:12:00,695

van Ooijen, Ubaldi, and Welby.

193

00:12:00,795 --> 00:12:03,554

I've provided the resources at the end

194

00:12:03,654 --> 00:12:06,103

and, again, I will share the slides with you.

195

00:12:06,398 --> 00:12:10,006

But here, it's four main activities.

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00:12:10,106 --> 00:12:12,855

So, first of all, collecting and generating data.

197

00:12:13,775 --> 00:12:16,758

Then storing, securing, and processing this data.

198

00:12:17,527 --> 00:12:20,933

The third one is around sharing, curating, and publishing.

199

00:12:21,001 --> 00:12:24,669

And the last one is using and reusing data.

200

00:12:24,800 --> 00:12:28,229

So, already you can see the variety of data activities

201

00:12:28,617 --> 00:12:31,366

that local government is involved with.

202

00:12:31,887 --> 00:12:33,846

And in terms of data uses,

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00:12:34,683 --> 00:12:37,711

local government uses data for a wide range of reasons.

204

00:12:37,811 --> 00:12:40,839

So, that could be operational monitoring.

205

00:12:41,277 --> 00:12:44,005

That could be making more strategic decisions

206

00:12:44,105 --> 00:12:47,934

and using performance and indicators using data.

207

00:12:48,113 --> 00:12:51,772

That could be monitoring the services uptake

208

00:12:52,020 --> 00:12:54,300

and trying to predict future trends

209

00:12:54,400 --> 00:12:56,059

and tailoring services.

210

00:12:56,300 --> 00:13:00,546

That could be designing policy or informing policy making.

211

00:13:00,787 --> 00:13:04,196

So, really, again, I keep putting an emphasis on that,

212

00:13:04,296 --> 00:13:09,555

but it's a wide range of data activities, data applications,

213

00:13:09,655 --> 00:13:11,244

and different types of data

214

00:13:11,344 --> 00:13:13,382

that local government uses.

215

00:13:15,233 --> 00:13:18,000

So, maybe, it might be useful now

216

00:13:18,100 --> 00:13:21,459

just to stop for a minute and think, what do we mean by data?

217

00:13:21,968 --> 00:13:23,747

And here, helpfully, Kitchin,

218

00:13:23,847 --> 00:13:26,235

Robert Kitchin, has provided a definition,

219

00:13:27,065 --> 00:13:30,253

as you can see on the screen. So, data is the raw material produced

220

00:13:30,353 --> 00:13:33,171

by abstracting the world into categories, measures,

221

00:13:33,620 --> 00:13:36,080

and other representational forms.

222

00:13:36,180 --> 00:13:37,638

And here you start thinking,

223

00:13:37,767 --> 00:13:39,755

this is going to be massive.

224

00:13:39,855 --> 00:13:42,758

It's a very wide, encompassing definition.

225

00:13:43,026 --> 00:13:46,664

And these forms are considered the building blocks

226

00:13:46,991 --> 00:13:49,259

from which information and knowledge are created.

227

00:13:49,700 --> 00:13:53,579

So, you start thinking, we need some more categories

228

00:13:53,679 --> 00:13:56,382

or something like a narrower definition of

229

00:13:56,482 --> 00:13:57,660

what we mean by data

230

00:13:57,760 --> 00:14:00,009

to really try to engage local government.

231

00:14:00,855 --> 00:14:05,515

And Kitchin has provided several criteria that you can use

232

00:14:05,615 --> 00:14:08,782

to define data, in particular, big data.

233

00:14:08,882 --> 00:14:11,650

And I'm sure you know and are aware of

234

00:14:13,866 --> 00:14:17,534

how big data is traditionally defined with the three Vs.

235

00:14:17,726 --> 00:14:18,814

So, volume.

236

00:14:18,914 --> 00:14:22,269

So, it's very large quantities of data.

237

00:14:23,227 --> 00:14:26,646

Velocity, created in real time.

238

00:14:26,855 --> 00:14:29,911

And variety. So, structured, semi-structured,

239

00:14:30,011 --> 00:14:31,129

unstructured data.

240

00:14:31,229 --> 00:14:35,769

And since this first definition came about in 2014,

241

00:14:35,869 --> 00:14:38,987

there have been a number of other criteria added to it.

242

00:14:39,087 --> 00:14:40,705

So, you have exhaustivity,

243

00:14:41,013 --> 00:14:43,900

relationality, resolution, scalability.

244

00:14:44,000 --> 00:14:45,487

So, you can see that on the screen.

245

00:14:45,587 --> 00:14:49,566

And he tried in his work to really distinguish between

246

00:14:49,666 --> 00:14:51,734

big data and small data.

247

00:14:51,834 --> 00:14:54,444

So, that will be one way of looking at

248

00:14:54,544 --> 00:14:57,794

what do we mean by data and trying to narrow it down.

249

00:14:58,144 --> 00:14:59,293

However,

250

00:14:59,900 --> 00:15:02,038

you have other ways of looking at this

251

00:15:02,138 --> 00:15:05,387

and that might be too technical for your participants.

252

00:15:07,000 --> 00:15:12,216

So, another way to look at trying to map data types

253

00:15:12,316 --> 00:15:17,364

and engage with the different types that local government uses

254

00:15:17,993 --> 00:15:20,731

might be looking at the idea of the data spectrum,

255

00:15:20,968 --> 00:15:24,228

which was published by the Open Data Institute,

256

00:15:25,435 --> 00:15:27,494

which is based here in the UK.

257

00:15:27,594 --> 00:15:29,742

And here you have three kinds of criteria.

258

00:15:29,842 --> 00:15:31,928

You have, again, the size.

259

00:15:32,118 --> 00:15:35,925

So, the categories are between small, medium, and big data.

260

00:15:36,025 --> 00:15:39,964

So, really, it's a spectrum rather than clear cut categories.

261

00:15:40,291 --> 00:15:41,298

You have the type.

262

00:15:41,398 --> 00:15:43,813

So, on the top, you can see personal

263

00:15:43,838 --> 00:15:46,579

versus commercial versus government data.

264

00:15:46,983 --> 00:15:51,164

Government data, sometimes, is understood as more administrative data.

265

00:15:51,571 --> 00:15:53,880

But, more recently, government is also

266

00:15:53,980 --> 00:15:58,657

starting to collect and generate more novel types of data,

267

00:15:59,024 --> 00:16:01,461

such as social media data,

268

00:16:01,561 --> 00:16:03,529

such as sensor data,

269

00:16:03,717 --> 00:16:05,815

for instance, using smart means,

270

00:16:05,949 --> 00:16:08,657

or such as mobile phone data

271

00:16:09,266 --> 00:16:11,175

using commercially owned data

272

00:16:11,275 --> 00:16:13,183

and getting that.

273

00:16:13,283 --> 00:16:15,788

So, again, a spectrum.

274

00:16:16,009 --> 00:16:18,558

And often this data is personal

275

00:16:18,658 --> 00:16:21,795

so aggregated and anonymised.

276

00:16:21,895 --> 00:16:25,423

So, again, it's really important to see it as a spectrum

277

00:16:25,523 --> 00:16:27,651

as the diagram shows.

278

00:16:28,150 --> 00:16:31,108

And the last criteria is around accessibility.

279

00:16:31,208 --> 00:16:35,455

So, here you have closed data, shared data and open data,

280

00:16:35,555 --> 00:16:39,350

and, again, a spectrum of different types of access

281

00:16:39,630 --> 00:16:42,126

to these data and examples.

282

00:16:43,315 --> 00:16:46,523

So, other classifications that you will find online,

283

00:16:46,623 --> 00:16:50,773

and there are plenty, can be public sector data versus private sector

284

00:16:50,873 --> 00:16:52,358

versus community data.

285

00:16:53,076 --> 00:16:56,733

So, again, it's really seeing that there are many, many ways of

286

00:16:56,833 --> 00:17:02,830

looking at different types of data and how you can categorise it

287

00:17:02,930 --> 00:17:05,760

and what might be the most helpful

288

00:17:06,179 --> 00:17:08,299

for you, for your research questions,

289

00:17:08,513 --> 00:17:13,176

but also, what type of categories are

290

00:17:13,276 --> 00:17:16,145

familiar and talk to your participants.

291

00:17:16,485 --> 00:17:20,434

If you choose, for instance, personal, commercial, and government data

292

00:17:20,534 --> 00:17:22,102

and think, that's helpful for me,

293

00:17:22,610 --> 00:17:27,016

if your participants don't really engage with these types of categories,

294

00:17:27,116 --> 00:17:30,374

it might be difficult for them to take part in the research.

295

00:17:30,474 --> 00:17:32,441

So, it's really thinking both ways.

296

00:17:33,801 --> 00:17:37,840

So, here I want to use a quick example and maybe you can use the chat function.

297

00:17:37,940 --> 00:17:39,789

Because we are 23 people here,

298

00:17:39,889 --> 00:17:42,217

it might be difficult if I ask everybody to do that.

299

00:17:42,515 --> 00:17:45,323

But if we look at mobility,

300

00:17:46,048 --> 00:17:50,756

what types of data, keeping in mind all of these different categories,

301

00:17:51,184 --> 00:17:55,500

what specific types of data do you think local government uses

302

00:17:55,600 --> 00:17:57,698

and generates to understand mobility?

303

00:17:58,216 --> 00:18:02,624

So, if you could just try to make some guesses

304

00:18:03,423 --> 00:18:06,731

here in the chat.

305

00:18:07,192 --> 00:18:08,681

Traffic surveys, yeah.

306

00:18:11,620 --> 00:18:13,024

Vehicle counts, which...

307

00:18:13,492 --> 00:18:15,100

Interesting. Vehicle counts can be

308

00:18:15,200 --> 00:18:17,938

both novel data if they use sensors

309

00:18:18,038 --> 00:18:22,885

but that could also be cordon, which they do several times a year.

310

00:18:24,102 --> 00:18:26,700

Yeah, use of services like Nextbike, definitely.

311

00:18:29,221 --> 00:18:32,399

Yeah, I think that we definitely love data on how we commute to work.

312

00:18:32,499 --> 00:18:36,147

I think that's something we'd definitely love to have more detailed data on.

313

00:18:36,367 --> 00:18:38,871

Census, household data on mobility, yeah.

314

00:18:41,402 --> 00:18:43,411

Ticket sales on public transport.

315

00:18:51,039 --> 00:18:52,360

Surveys, yeah.

316

00:18:54,346 --> 00:18:56,777

Yeah, public transport.

317

00:18:57,667 --> 00:19:02,956

Yeah. So, definitely, all of these are

318

00:19:03,056 --> 00:19:06,265

absolutely what they use.

319

00:19:06,365 --> 00:19:10,954

So, I have mapped, roughly, what Glasgow City Council use

320

00:19:11,204 --> 00:19:14,378

at the moment. And I'm sure it's not exhaustive.

321

00:19:15,206 --> 00:19:19,236

But, yeah, there are traffic sensors and bike counts as well

322

00:19:20,605 --> 00:19:23,183

that are installed by the council

323

00:19:23,283 --> 00:19:25,412

and that do collect data.

324

00:19:25,512 --> 00:19:29,020

So, at the moment, a project, actually with UBDC,

325

00:19:29,120 --> 00:19:33,648

in which they're looking at CCTV, anonymised pedestrian counts,

326

00:19:33,748 --> 00:19:38,506

they are developing this and will use it for understanding mobility.

327

00:19:38,607 --> 00:19:41,375

So, that's, kind of, more on the real-time data.

328

00:19:41,500 --> 00:19:43,430

Then there's less real-time data

329

00:19:43,530 --> 00:19:45,469

and I think you've mentioned that in the chat.

330

00:19:45,569 --> 00:19:50,687

So, obviously, surveys, census, statistics,

331

00:19:51,124 --> 00:19:57,942

the cordon which also has the sensing and counting the number of cars

332

00:19:58,042 --> 00:19:59,120

and number of buses.

333

00:19:59,610 --> 00:20:02,278

But literally doing that manually.

334

00:20:02,900 --> 00:20:05,179

And then you also have private data

335

00:20:05,279 --> 00:20:06,618

or private phone data

336

00:20:06,853 --> 00:20:10,457

that can be real-time or can be more historic data.

337

00:20:10,557 --> 00:20:11,846

So, you have, obviously,

338

00:20:11,946 --> 00:20:15,254

the data around the different types of public transport.

339

00:20:15,354 --> 00:20:17,932

So, SPT, Scotrail, bus companies.

340

00:20:18,170 --> 00:20:20,769

Nextbike, which was mentioned in the chat,

341

00:20:20,869 --> 00:20:23,528

there is also an API for that.

342

00:20:23,975 --> 00:20:29,384

Strava data, which was made available to all cities recently by the company.

343

00:20:29,763 --> 00:20:32,263

Or, even more broadly, Google mobility data,

344

00:20:32,363 --> 00:20:36,979

which obviously won't have a lot of granularity in those data.

345

00:20:37,079 --> 00:20:40,947

But these are all potential types of data

346

00:20:41,047 --> 00:20:43,563

that are used by local government.

347

00:20:44,965 --> 00:20:46,643

Yeah. Okay.

348

00:20:49,043 --> 00:20:52,494

So, here I'm just going to

349

00:20:52,655 --> 00:20:56,835

present the terminology that we used in our project

350

00:20:56,935 --> 00:21:00,663

and why we decided to go for that one.

351

00:21:02,644 --> 00:21:07,821

So, the typology is around five different types of data

352

00:21:07,921 --> 00:21:13,358

and we first decided to use public sector, private sector,

353

00:21:13,458 --> 00:21:19,545

third sector terminology which is used by several scholars.

354

00:21:19,848 --> 00:21:22,326

And we decided, actually, to distinguish between

355

00:21:22,924 --> 00:21:25,322

internal and external public sector data

356

00:21:25,422 --> 00:21:26,720

and that was really because

357

00:21:26,925 --> 00:21:32,321

we were interested in capturing local government's data uses

358

00:21:32,421 --> 00:21:37,018

but also how they interact with other organisations,

359

00:21:37,118 --> 00:21:40,687

and that included other public sector organisations.

360

00:21:42,338 --> 00:21:44,627

So, first, public sector data is

361

00:21:44,727 --> 00:21:47,516

data collected either by local government

362

00:21:47,616 --> 00:21:51,115

or by Scottish/UK government and public bodies.

363

00:21:51,274 --> 00:21:53,083

And, as I said, it's internal or external.

364

00:21:53,494 --> 00:21:56,614

Third sector data, we defined that as

365

00:21:56,714 --> 00:21:59,600

data provided by charities, voluntary organisations,

366

00:21:59,700 --> 00:22:02,028

community groups, and social enterprises.

367

00:22:02,754 --> 00:22:07,953

Private sector data is data provided commercially by private companies

368

00:22:08,053 --> 00:22:09,402

and data brokers.

369

00:22:09,502 --> 00:22:14,451

And then we added onto this terminology novel data,

370

00:22:14,771 --> 00:22:18,099

which we defined as new types of digital data

371

00:22:18,458 --> 00:22:23,137

collected via social media or applications,

372

00:22:24,287 --> 00:22:26,175

or via connected infrastructure

373

00:22:26,275 --> 00:22:28,450

and sensors, such as the Internet of Things.

374

00:22:28,580 --> 00:22:31,674

And we are aware that there is an overlap between

375

00:22:32,414 --> 00:22:35,023

private sector data and novel data.

376

00:22:35,213 --> 00:22:38,131

In particular, within smart city initiatives

377

00:22:38,613 --> 00:22:41,092

that are taking place within local government.

378

00:22:41,400 --> 00:22:43,925

But, really, our research was interested in

379

00:22:44,700 --> 00:22:50,278

capturing whether local government was using these novel forms of data.

380

00:22:50,378 --> 00:22:54,526

So, that's why we decided to add it on to the typology.

381

00:23:00,437 --> 00:23:01,947

Sorry. It's going too fast.

382

00:23:03,046 --> 00:23:08,074

So, here, really, what I wanted to highlight is

383

00:23:08,174 --> 00:23:12,759

there is no one way of looking at data

384

00:23:12,859 --> 00:23:17,908

and creating one typology that works for every context.

385

00:23:18,098 --> 00:23:21,157

I think it's really trying to think about your research question

386

00:23:21,257 --> 00:23:24,435

and what you're interested in capturing

387

00:23:25,902 --> 00:23:28,166

and adjusting your typology to that.

388

00:23:28,266 --> 00:23:29,904

So, really scoping the literature,

389

00:23:30,813 --> 00:23:34,001

eventually, if possible, engaging with the stakeholders

390

00:23:34,101 --> 00:23:37,110

and data practitioners in local government

391

00:23:37,210 --> 00:23:41,707

to really see if your terminology resonates with their experiences,

392

00:23:41,954 --> 00:23:47,062

and really trying to align your typology to your research objectives.

393

00:23:47,311 --> 00:23:52,509

And here, I'm just going to ask if you have any questions at this stage.

394

00:23:56,350 --> 00:23:58,078

So, you can raise your hand

395

00:24:00,117 --> 00:24:03,465

or interact in the chat

396

00:24:04,235 --> 00:24:06,526

if you have any questions.

397

00:24:07,052 --> 00:24:09,288

Yeah. There is one question by Emily.

398

00:24:10,365 --> 00:24:13,083

Hi, thanks. This is really interesting so far.

399

00:24:15,049 --> 00:24:18,597

I don't know how much engagement you did with people working in local authorities

400

00:24:18,697 --> 00:24:21,755

about this typology and how much it was informed by

401

00:24:21,855 --> 00:24:24,252

their understanding of different data types

402

00:24:24,629 --> 00:24:26,280

and their uses.

403

00:24:26,829 --> 00:24:29,003

Yeah, no, it's a really, really good question.

404

00:24:29,103 --> 00:24:30,182

Thanks for asking.

405

00:24:30,771 --> 00:24:34,350

And you will see in the tips later I'm going to touch on that.

406

00:24:34,818 --> 00:24:37,308

We created this typology

407

00:24:37,408 --> 00:24:39,596

by both scoping the literature,

408

00:24:39,696 --> 00:24:43,265

so using the different typology I presented and others,

409

00:24:43,863 --> 00:24:47,291

but also, we went back to the Digital Office for

410

00:24:47,391 --> 00:24:48,530

Scottish local government,

411

00:24:48,630 --> 00:24:52,007

which is the organisation that works with local government

412

00:24:52,583 --> 00:24:55,443

in Scotland and help them, support them

413

00:24:55,543 --> 00:24:57,369

in their digital transformation,

414

00:24:57,496 --> 00:25:00,445

and really asked them, does that resonate with you?

415

00:25:00,914 --> 00:25:02,762

Is it something that makes sense?

416

00:25:03,012 --> 00:25:08,466

Because we didn't want to come in and kind of impose one terminology.

417

00:25:09,174 --> 00:25:11,881

When we used that sort of terminology in the research,

418

00:25:12,219 --> 00:25:14,738

in particular, in our survey,

419

00:25:14,837 --> 00:25:19,245

we also defined it clearly at the beginning to make sure that

420

00:25:20,012 --> 00:25:21,799

it was clear for participants.

421

00:25:21,899 --> 00:25:24,638

So, that is how we dealt with this.

422

00:25:24,738 --> 00:25:26,177

Great. Thanks.

423

00:25:27,297 --> 00:25:29,216

Any other questions?

424

00:25:35,701 --> 00:25:37,589

No? Okay, so I will move on from here.

425

00:25:37,689 --> 00:25:42,148

But, again, feel free to ask questions at any time.

426

00:25:42,564 --> 00:25:44,266

Okay. So, the second area

427

00:25:44,952 --> 00:25:47,307

when we started the project,

428

00:25:47,698 --> 00:25:49,704

we were looking at different data types

429

00:25:49,804 --> 00:25:54,060

and how local government used these different data types.

430

00:25:54,169 --> 00:25:57,901

And then we said, well, actually, there is more to it.

431

00:25:58,337 --> 00:26:03,763

And we started mapping the local government data engagement,

432

00:26:03,863 --> 00:26:06,920

the different areas in which people engaged

433

00:26:07,114 --> 00:26:08,271

in relation to data.

434

00:26:08,371 --> 00:26:12,176

And here, again, we had several iterations of this

435

00:26:12,877 --> 00:26:16,960

and we had discussions with the Digital Office

436

00:26:17,060 --> 00:26:18,101

about this as well.

437

00:26:18,201 --> 00:26:22,068

It's really trying to understand what are the different aspects of

438

00:26:22,168 --> 00:26:25,275

data engagement within local government.

439

00:26:25,384 --> 00:26:27,309

And here, we were like, okay,

440

00:26:27,409 --> 00:26:29,385

there are different data types, obviously,

441

00:26:29,913 --> 00:26:35,358

but also, local government is engaging within a broader data ecosystem.

442

00:26:35,458 --> 00:26:37,151

And I think I've mentioned that already.

443

00:26:37,251 --> 00:26:39,446

Sharing data with public sector organisations,

444

00:26:39,546 --> 00:26:41,801

third sector, private corporations.

445

00:26:41,901 --> 00:26:44,526

They're collaborating together

446

00:26:45,231 --> 00:26:47,905

to generate insight and so on.

447

00:26:48,005 --> 00:26:50,560

So, it was more than only the data types.

448

00:26:50,760 --> 00:26:53,925

So, we started mapping this around four areas.

449

00:26:54,266 --> 00:26:57,590

So, the first one was around the different sources of data

450

00:26:57,690 --> 00:27:01,315

for local government, that are external to local government.

451

00:27:01,624 --> 00:27:06,394

Then the different types of data capabilities that they use and need

452

00:27:06,583 --> 00:27:08,761

and maybe lack in some aspects

453

00:27:09,000 --> 00:27:11,159

to engage with data.

454

00:27:11,420 --> 00:27:16,360

Then the data sharing they do with external organisations.

455

00:27:16,460 --> 00:27:18,639

And then, if possible at all,

456

00:27:19,386 --> 00:27:21,924

we were interested in capturing

457

00:27:22,100 --> 00:27:24,168

the collaborations that were taking place.

458

00:27:24,268 --> 00:27:27,656

And I'm just going to go into detail on each of these areas

459

00:27:27,756 --> 00:27:31,452

so you can hopefully get a better understanding of the mapping.

460

00:27:32,604 --> 00:27:36,444

So, we started with the sources of data and the data sourcing.

461

00:27:36,805 --> 00:27:38,576

And here we're really interested in

462

00:27:38,887 --> 00:27:43,017

mapping the different sources for local government of

463

00:27:43,305 --> 00:27:46,066

the different types of organisations they got data from

464

00:27:46,166 --> 00:27:48,027

or they accessed data from.

465

00:27:48,776 --> 00:27:52,817

So, here you can see what we've done on the screen.

466

00:27:52,917 --> 00:27:57,079

So, we added different bubbles for each type of source.

467

00:27:57,179 --> 00:27:58,321

So, public sector.

468

00:27:58,421 --> 00:28:00,932

And I think in the survey we detailed that

469

00:28:01,653 --> 00:28:06,414

in more fine-grained categories,

470

00:28:06,514 --> 00:28:10,842

such as NHS Boards or Police Scotland

471

00:28:10,942 --> 00:28:14,553

or different types of government agencies and so on.

472

00:28:14,653 --> 00:28:17,138

So, we had a fine-grained understanding of

473

00:28:17,238 --> 00:28:18,916

the different public sector organisations

474

00:28:19,016 --> 00:28:21,156

they were sourcing data from.

475

00:28:21,915 --> 00:28:25,184

Then private corporations and local businesses.

476

00:28:25,284 --> 00:28:27,961

We kind of wanted here to have a distinction between

477

00:28:28,061 --> 00:28:32,600

big tech corporations and maybe the corporations that would

478

00:28:32,700 --> 00:28:34,246

provide these services

479

00:28:34,346 --> 00:28:37,356

and local businesses that were obviously on a different scale

480

00:28:37,600 --> 00:28:39,718

but that are still private sector data.

481

00:28:40,199 --> 00:28:41,521

Then third sector

482

00:28:43,067 --> 00:28:47,296

and grassroot community and citizens.

483

00:28:48,209 --> 00:28:51,758

Research institutions, such as the UBDC, for example.

484

00:28:52,375 --> 00:28:54,363

But also, other research institutions

485

00:28:54,463 --> 00:28:57,989

such as the Data Lab and other organisations that

486

00:28:58,089 --> 00:29:00,056

collaborate with local government.

487

00:29:00,156 --> 00:29:03,145

And connected infrastructures and system sensors.

488

00:29:03,245 --> 00:29:07,551

So, that's all the new novel data around the Internet of Things.

489

00:29:07,651 --> 00:29:09,830

And that is captured here.

490

00:29:11,301 --> 00:29:16,299

So, the second area of data engagement we mapped was

491

00:29:16,399 --> 00:29:18,248

around data capabilities.

492

00:29:18,348 --> 00:29:21,716

And I think, in many ways, this one was the trickiest one

493

00:29:22,876 --> 00:29:25,704

because you would see in the literature,

494

00:29:25,952 --> 00:29:29,181

and, again, I will share the slides and you will have the references at the end,

495

00:29:29,369 --> 00:29:31,940

but there is a wide range of understanding of

496

00:29:32,040 --> 00:29:36,529

what needs to be captured in terms of data-related capabilities.

497

00:29:37,629 --> 00:29:40,259

And so, here, for example, you have a framework that includes

498

00:29:40,708 --> 00:29:43,253

IT governance, IT resources,

499

00:29:43,779 --> 00:29:46,773

attitudes towards data, sort of data culture,

500

00:29:47,457 --> 00:29:50,194

legal compliance, data government,

501

00:29:50,363 --> 00:29:51,902

and data expertise.

502

00:29:52,032 --> 00:29:53,630

So, it's really, really broad

503

00:29:53,888 --> 00:29:57,929

and, at the same time, you also want to think about

504

00:29:58,029 --> 00:29:59,925

the different uses

505

00:30:00,025 --> 00:30:03,904

and data activities that I've mentioned earlier in the presentation.

506

00:30:04,474 --> 00:30:06,993

So, the processing of data,

507

00:30:07,093 --> 00:30:08,811

the capturing of data,

508

00:30:08,971 --> 00:30:12,347

the maintenance, analysis, and interpretation of data.

509

00:30:12,447 --> 00:30:18,347

So, it's really a lot of things to capture within data capabilities.

510

00:30:18,447 --> 00:30:20,620

But we really wanted to do this because

511

00:30:20,720 --> 00:30:25,088

we wanted to capture the needs and potentially the gaps that were

512

00:30:25,602 --> 00:30:29,731

impinging local government to use data.

513

00:30:30,060 --> 00:30:32,508

So, here we settled for

514

00:30:33,065 --> 00:30:35,913

different areas that hopefully captured

515

00:30:36,520 --> 00:30:39,587

the capabilities and also the different aspects of

516

00:30:39,687 --> 00:30:41,746

the data lifecycle.

517

00:30:42,165 --> 00:30:46,546

So, we started with capabilities around Human Resources and skills.

518

00:30:47,742 --> 00:30:50,770

Then we moved on to infrastructures and software.

519

00:30:50,870 --> 00:30:52,887

So, infrastructure is more the hardware

520

00:30:52,987 --> 00:30:55,266

and software, for instance,

521

00:30:56,064 --> 00:30:57,832

visualisation tools that they use

522

00:30:57,932 --> 00:30:59,898

but also processing software.

523

00:31:00,700 --> 00:31:02,898

Then we had internal capture and retrieval,

524

00:31:02,998 --> 00:31:08,066

and here, really tried to capture the internal sharing data capabilities

525

00:31:08,584 --> 00:31:12,392

and maybe the internal silos and how that worked.

526

00:31:12,886 --> 00:31:16,213

Then processing and integration of data.

527

00:31:17,411 --> 00:31:21,016

And within local government, the analysis of data.

528

00:31:21,495 --> 00:31:22,784

Storage and maintenance.

529

00:31:22,884 --> 00:31:27,389

And the last one which was of interest to us

530

00:31:27,489 --> 00:31:32,197

but also, I think, spoke to the broader research question was

531

00:31:32,506 --> 00:31:35,315

whether there was a strategy in place

532

00:31:35,812 --> 00:31:39,012

with regards to data use within local government.

533

00:31:39,112 --> 00:31:41,020

So, the strategical aspect

534

00:31:41,379 --> 00:31:42,787

in terms of capabilities here.

535

00:31:44,196 --> 00:31:46,895

That was the second area.

536

00:31:47,205 --> 00:31:51,144

The third is around data sharing and here we really focused on

537

00:31:51,321 --> 00:31:53,520

not internal data sharing because

538

00:31:53,620 --> 00:31:56,999

that was captured in the capabilities in the previous slide.

539

00:31:57,099 --> 00:31:59,020

but external data sharing

540

00:31:59,120 --> 00:32:02,579

and trying to understand how we can capture that.

541

00:32:03,327 --> 00:32:06,544

So, instead of having, again, the potential organisation

542

00:32:06,644 --> 00:32:09,041

with local government cultured data,

543

00:32:09,141 --> 00:32:13,519

we decided to use the mechanism by which they do share data.

544

00:32:13,619 --> 00:32:18,115

And here we listed graphical user interfaces

545

00:32:18,215 --> 00:32:19,682

such as dashboards,

546

00:32:20,358 --> 00:32:22,765

Application Programming Interfaces,

547

00:32:22,993 --> 00:32:25,421

but also licenses and agreements,

548

00:32:25,738 --> 00:32:28,178

such as data sharing agreements, for example,

549

00:32:28,244 --> 00:32:31,531

or the publication of open datasets.

550

00:32:31,750 --> 00:32:35,431

And, for us, that really provided us with

551

00:32:35,977 --> 00:32:38,378

a way of capturing the maturity of

552

00:32:38,478 --> 00:32:41,721

local government with regards to data sharing.

553

00:32:41,821 --> 00:32:46,104

And we saw it as in terms of data accessibility and visibility.

554

00:32:47,854 --> 00:32:51,220

And finally, we were quite interested in

555

00:32:51,803 --> 00:32:53,973

exploring whether local government was

556

00:32:54,146 --> 00:32:56,602

collaborating with different stakeholders

557

00:32:56,702 --> 00:32:58,899

to collect, use, and analyse data.

558

00:32:59,084 --> 00:33:01,989

So, that's a step further from data sharing.

559

00:33:02,115 --> 00:33:05,928

So, data sharing is, basically,

560

00:33:06,126 --> 00:33:10,927

implementing protocols to make data accessible to other stakeholders.

561

00:33:11,154 --> 00:33:14,884

Here, data collaboration is really working together to

562

00:33:14,984 --> 00:33:18,290

create, collect, use, and analyse data

563

00:33:18,390 --> 00:33:20,755

and produce insights from data.

564

00:33:20,845 --> 00:33:24,212

And here we replicated the number of stakeholders that

565

00:33:24,994 --> 00:33:28,944

local government is collaborating with

566

00:33:29,927 --> 00:33:31,136

in this sector.

567

00:33:32,036 --> 00:33:33,513

So, overall,

568

00:33:33,613 --> 00:33:39,626

we had a good, quite complex map

569

00:33:39,997 --> 00:33:41,559

that emerged from this exercise.

570

00:33:41,788 --> 00:33:44,853

And this was really useful for us

571

00:33:44,953 --> 00:33:48,555

to understand, first of all,

572

00:33:48,655 --> 00:33:53,741

the context in which local government data engagement is located,

573

00:33:54,017 --> 00:33:58,261

but also to design the survey, which I'm going to come to in a minute.

574

00:33:58,657 --> 00:34:03,262

And the survey that we wanted to do

575

00:34:03,362 --> 00:34:06,117

to systematically capture

576

00:34:06,217 --> 00:34:08,705

what the data practices of local government are.

577

00:34:08,805 --> 00:34:12,630

And so, we designed it around these four broad areas.

578

00:34:16,066 --> 00:34:17,275

And at this stage...

579

00:34:17,584 --> 00:34:20,073

Oh, no. I have another slide on quick tips

580

00:34:20,173 --> 00:34:22,049

and then I will open it up for questions again.

581

00:34:22,791 --> 00:34:24,885

So, in terms of practical tips,

582

00:34:25,093 --> 00:34:26,912

I would say it's very important to review

583

00:34:27,012 --> 00:34:28,682

the academic and policy literature,

584

00:34:28,782 --> 00:34:31,678

as you would do, but also the grey literature.

585

00:34:32,274 --> 00:34:35,813

So, for instance, blog posts by data practitioners are

586

00:34:35,913 --> 00:34:37,165

quite useful in that way

587

00:34:37,265 --> 00:34:40,564

and also quite useful to really capture the terminology

588

00:34:40,842 --> 00:34:42,931

that practitioners use,

589

00:34:43,031 --> 00:34:46,260

especially if you want to do a survey with practitioners.

590

00:34:47,265 --> 00:34:50,193

So, keeping in mind your research objectives/questions.

591

00:34:50,293 --> 00:34:54,537

So, as I said, the terminology that we ended up using was

592

00:34:56,244 --> 00:34:58,103

adding novel types of data because

593

00:34:58,203 --> 00:35:01,703

we were really interested in these new forms of data

594

00:35:01,803 --> 00:35:03,801

and whether local government were

595

00:35:03,901 --> 00:35:05,100

making use of it.

596

00:35:05,300 --> 00:35:10,259

And, also, we had quite a big part on data collaborations

597

00:35:10,397 --> 00:35:13,115

and different networks that are emerging in Scotland

598

00:35:13,215 --> 00:35:14,455

and within data collaboration

599

00:35:14,682 --> 00:35:17,014

because we were also really interested in that.

600

00:35:17,114 --> 00:35:21,161

But maybe if your research objectives aren't really around this,

601

00:35:21,261 --> 00:35:26,148

you can have broader, more finely defined data capabilities,

602

00:35:26,248 --> 00:35:27,484

for example.

603

00:35:28,684 --> 00:35:30,663

Using mapping and visualisation tools.

604

00:35:30,763 --> 00:35:34,261

Actually, it's quite useful to write it down,

605

00:35:35,659 --> 00:35:38,178

map it with those tools

606

00:35:38,278 --> 00:35:40,896

and really show the different areas you can engage with.

607

00:35:42,306 --> 00:35:44,833

As I just had the question earlier on,

608

00:35:45,341 --> 00:35:49,840

if possible it's great to consult with stakeholders and practitioners.

609

00:35:49,940 --> 00:35:52,708

So, as I said, we had several meetings with the Digital Office

610

00:35:52,808 --> 00:35:55,516

and we really discussed with them

611

00:35:55,914 --> 00:35:58,939

the relevance and whether the terminology was working.

612

00:35:59,273 --> 00:36:03,074

Also, whether we have missed any big areas of data engagement

613

00:36:03,252 --> 00:36:06,231

and whether they recognised the terminology we used.

614

00:36:07,175 --> 00:36:09,194

And create several iterations

615

00:36:09,294 --> 00:36:12,128

and use different possible focuses and levels of detail

616

00:36:12,987 --> 00:36:16,005

because I think it's really important that

617

00:36:16,253 --> 00:36:20,891

you see that data can be looked at in different ways.

618

00:36:21,205 --> 00:36:24,823

So, you need to make sure that you get the lens that will answer the question

619

00:36:25,333 --> 00:36:26,702

you are interested in.

620

00:36:26,851 --> 00:36:28,694

So, really playing around with it.

621

00:36:28,794 --> 00:36:32,523

And it's a process, so you won't get it right the first time around.

622

00:36:32,623 --> 00:36:36,231

You really need to play with it for a little bit.

623

00:36:37,022 --> 00:36:39,129

Any questions at this stage?

624

00:36:45,831 --> 00:36:48,931

Yeah, I can't see any hands.

625

00:36:50,866 --> 00:36:53,236

Was it difficult to match data?

626

00:36:53,596 --> 00:36:55,723

Yes, it was.

627

00:36:56,444 --> 00:36:59,891

So, what was interesting in this project was that

628

00:37:02,728 --> 00:37:07,238

we designed a survey and it was obviously in the context of COVID-19.

629

00:37:07,338 --> 00:37:12,367

So, for example, we had to map the internal public sector data

630

00:37:12,467 --> 00:37:15,467

that local government potentially use

631

00:37:16,354 --> 00:37:18,134

in the context of COVID-19.

632

00:37:18,244 --> 00:37:22,068

And what we did is we really scoped the literature

633

00:37:22,168 --> 00:37:25,164

and, as I said, we also engaged with the Digital Office

634

00:37:25,264 --> 00:37:27,504

for Scottish local government.

635

00:37:27,604 --> 00:37:32,662

That really helped us to have a list of different data

636

00:37:32,762 --> 00:37:34,141

that local government use.

637

00:37:34,241 --> 00:37:38,489

But I also put in the survey a little box saying "Other"

638

00:37:38,589 --> 00:37:40,217

and then "Please specify"

639

00:37:40,398 --> 00:37:44,975

because it was good to capture as much as I could in the survey

640

00:37:45,075 --> 00:37:46,515

and list it.

641

00:37:46,701 --> 00:37:50,227

But then I was like, oh, if there is another type of data

642

00:37:50,327 --> 00:37:54,270

I haven't thought of or the literature hasn't identified,

643

00:37:54,370 --> 00:37:57,098

maybe it's also good to give the participants the option

644

00:37:57,298 --> 00:38:00,949

to add another type of data.

645

00:38:01,049 --> 00:38:04,300

So, that was how we went around this.

646

00:38:09,348 --> 00:38:12,036

Okay, I'm just going to move on. I'm aware of the time.

647

00:38:12,646 --> 00:38:15,053

So, let's move on to the design itself.

648

00:38:15,153 --> 00:38:18,191

And again, with the report,

649

00:38:18,888 --> 00:38:20,526

I've provided a link at the beginning.

650

00:38:20,704 --> 00:38:23,992

So, we designed a mixed-methods approach here.

651

00:38:24,092 --> 00:38:26,180

And the first part of the project was

652

00:38:26,280 --> 00:38:28,698

around scoping the literature, as I said.

653

00:38:28,798 --> 00:38:31,036

The mapping exercise that I just showed you.

654

00:38:31,287 --> 00:38:33,643

And consultation with stakeholders.

655

00:38:34,251 --> 00:38:37,960

And then we used this to design the survey.

656

00:38:38,060 --> 00:38:41,195

And focus groups and interviews. And I'm going to get into more detail

657

00:38:41,295 --> 00:38:45,069

about quantitative data collection and qualitative data collection

658

00:38:45,169 --> 00:38:46,257

and data analysis.

659

00:38:46,571 --> 00:38:49,699

But really, using a mixed-methods approach is

660

00:38:49,799 --> 00:38:54,223

referring to a methodology that advanced the integration of

661

00:38:54,323 --> 00:38:56,321

quantitative and qualitative data.

662

00:38:56,421 --> 00:38:59,479

That really helps the robustness of the research,

663

00:38:59,697 --> 00:39:02,664

but also helps to validate the findings.

664

00:39:02,822 --> 00:39:06,640

So, you really see, you look at your research questions.

665

00:39:06,740 --> 00:39:11,546

So, how does local government use data in the context of COVID-19

666

00:39:11,646 --> 00:39:13,483

from different perspectives.

667

00:39:13,583 --> 00:39:15,000

So, from the survey perspective

668

00:39:15,100 --> 00:39:18,447

or from a more qualitative data insights perspective.

669

00:39:18,547 --> 00:39:21,785

And that really helps to ensure robustness

670

00:39:21,885 --> 00:39:24,323

but also the validity of your findings.

671

00:39:24,423 --> 00:39:27,140

You can corroborate your findings.

672

00:39:28,180 --> 00:39:30,087

So, here, first we started with

673

00:39:30,187 --> 00:39:33,804

a survey of the 32 Scottish local authorities.

674

00:39:34,509 --> 00:39:37,006

So, as I said, the survey was designed

675

00:39:37,554 --> 00:39:42,841

drawing on the mapping exercise that I just went through with you

676

00:39:43,273 --> 00:39:46,341

and in consultation with the Digital Office.

677

00:39:47,287 --> 00:39:52,646

And we decided to actually have a sample of 64 participants.

678

00:39:52,745 --> 00:39:58,784

So, two people from each of the 32 local authorities in Scotland.

679

00:39:59,053 --> 00:40:02,859

So, first, we targeted one data specialist

680

00:40:02,959 --> 00:40:08,614

or someone that had a portfolio around data or digital transformation.

681

00:40:08,860 --> 00:40:11,348

And then, the second person was

682

00:40:12,584 --> 00:40:15,301

someone working with a team around recovery

683

00:40:15,428 --> 00:40:18,766

or more like senior management level.

684

00:40:18,965 --> 00:40:20,727

And we thought it was really useful to have

685

00:40:20,885 --> 00:40:22,687

the data practitioner perspective

686

00:40:22,787 --> 00:40:26,229

and the senior management recovery perspective.

687

00:40:26,329 --> 00:40:31,071

And that was our way of capturing these perspectives.

688

00:40:31,872 --> 00:40:34,111

The Digital Office acted as a gatekeeper

689

00:40:34,211 --> 00:40:37,740

and really helped to produce the survey and focus groups

690

00:40:38,113 --> 00:40:42,594

Then the second part of the design was

691

00:40:42,694 --> 00:40:45,146

around the qualitative data collection.

692

00:40:45,246 --> 00:40:46,657

And here we had two strengths.

693

00:40:46,757 --> 00:40:49,608

So, focus groups, a series of focus groups,

694

00:40:49,960 --> 00:40:51,531

and, again, we decided to have

695

00:40:51,631 --> 00:40:53,554

a slightly different scope for each focus group.

696

00:40:53,654 --> 00:40:55,475

So, first of all, the first one was

697

00:40:58,400 --> 00:41:00,851

with local authorities, amongst themselves,

698

00:41:00,951 --> 00:41:04,013

and they really discussed the types of data they used

699

00:41:04,454 --> 00:41:06,126

to respond to the crisis.

700

00:41:06,245 --> 00:41:09,494

The second one was around data collaboration and sharing

701

00:41:09,594 --> 00:41:12,588

between local authorities and public sector organisations.

702

00:41:12,688 --> 00:41:16,654

And the third one was around data collaboration and sharing

703

00:41:16,754 --> 00:41:19,163

between local authorities and third sector organisations.

704

00:41:19,253 --> 00:41:24,742

So, that was really to corroborate some of the survey themes.

705

00:41:25,278 --> 00:41:28,126

And we actually used some of the survey results as prompts

706

00:41:28,374 --> 00:41:31,641

and that sort of helped with data triangulation as well.

707

00:41:32,400 --> 00:41:37,588

And we also had a series of interviews with experts

708

00:41:38,466 --> 00:41:42,052

that were representing different organisations in Scotland.

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00:41:42,201 --> 00:41:47,194

So, Improvement Services, Scottish Cities Alliance, and so on.

710

00:41:49,077 --> 00:41:51,024

So, in terms of data analysis, we did

711

00:41:51,124 --> 00:41:52,731

a descriptive statistical analysis of

712

00:41:52,831 --> 00:41:54,178

the survey results

713

00:41:54,958 --> 00:41:58,891

and we really combined that with a textual analysis of

714

00:41:58,991 --> 00:42:02,175

the expert interviews and focus groups.

715

00:42:02,275 --> 00:42:03,938

And we used a range of software

716

00:42:04,038 --> 00:42:05,886

to support the analysis and visualisations.

717

00:42:05,986 --> 00:42:08,891

So, we used NVivo, which is quite good for that.

718

00:42:09,437 --> 00:42:11,905

And we also used some of the inbuilt software

719

00:42:12,005 --> 00:42:16,096

in the JISC online survey as well.

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00:42:16,196 --> 00:42:18,725

And we really did this triangulation

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00:42:18,825 --> 00:42:22,640

to help ensure the validity and robustness of the research.

722

00:42:22,740 --> 00:42:27,638

So, we looked at whether the emerging themes from the survey were

723

00:42:27,738 --> 00:42:30,908

also emerging in the interviews and the focus groups.

724

00:42:31,008 --> 00:42:33,456

And maybe the interviews and focus groups would provide us

725

00:42:33,556 --> 00:42:37,964

more in-depth insights into something emerging from the surveys.

726

00:42:38,064 --> 00:42:40,073

That was really how we did it

727

00:42:40,799 --> 00:42:42,560

in terms of triangulation.

728

00:42:43,719 --> 00:42:46,488

So, just some quick tips for a mixed-methods approach.

729

00:42:46,588 --> 00:42:47,996

I'm just aware of the time.

730

00:42:48,126 --> 00:42:50,115

So, obviously follow ethical guidance.

731

00:42:51,023 --> 00:42:52,856

Think about the order of each step

732

00:42:52,956 --> 00:42:54,665

and how they feed into one another.

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00:42:54,872 --> 00:42:56,960

So, we started with the survey

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00:42:57,060 --> 00:43:02,013

and it took quite a bit of time to get going and to design.

735

00:43:02,335 --> 00:43:04,812

And then we did the focus groups and interviews

736

00:43:05,411 --> 00:43:07,621

roughly around the same time.

737

00:43:08,480 --> 00:43:10,488

Because we wanted the survey results

738

00:43:10,588 --> 00:43:11,926

to inform the interviews.

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00:43:12,026 --> 00:43:15,374

We really had to have a substantial amount of time between

740

00:43:15,474 --> 00:43:19,082

the survey and the more qualitative phase of the research.

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00:43:19,182 --> 00:43:21,536

So, it's really something to keep in mind when you're

742

00:43:21,636 --> 00:43:22,849

designing your research.

743

00:43:22,995 --> 00:43:25,813

The ordering of each step and whether you want to do them

744

00:43:26,142 --> 00:43:28,460

Simultaneously or one after the other

745

00:43:28,560 --> 00:43:31,887

because they inform or they feed into one another.

746

00:43:32,878 --> 00:43:34,762

Be aware of the time commitment required

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00:43:34,862 --> 00:43:36,396

to prepare each step.

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00:43:36,596 --> 00:43:39,954

So, I think I've touched on that with the previous comments.

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00:43:40,272 --> 00:43:44,879

And also make sure that you detail the organisational requirements

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00:43:45,414 --> 00:43:47,512

So, if you need support to run your focus group.

751

00:43:49,358 --> 00:43:51,765

If local authorities use specific tools as well.

752

00:43:51,865 --> 00:43:53,239

So, for example, we know that

753

00:43:53,339 --> 00:43:56,788

local authorities mostly use Microsoft Teams

754

00:43:56,888 --> 00:43:58,157

so you will have to use this.

755

00:43:58,257 --> 00:44:01,626

So, really consider all of these organisational requirements.

756

00:44:01,965 --> 00:44:05,113

And maybe also consider skills or software training.

757

00:44:05,213 --> 00:44:06,592

So, for instance, NVivo

758

00:44:06,692 --> 00:44:11,152

or if you want to get into more depth with statistical data,

759

00:44:11,252 --> 00:44:12,890

maybe R as well.

760

00:44:14,769 --> 00:44:16,548

Okay. And the last...

761

00:44:17,407 --> 00:44:19,936

And I will open it to questions in just two minutes.

762

00:44:20,036 --> 00:44:23,905

But the last point is around collaborating with key stakeholders.

763

00:44:24,386 --> 00:44:30,653

So, the research project we ran in the past year was really successful.

764

00:44:30,753 --> 00:44:33,320

And a large part of that was because

765

00:44:33,420 --> 00:44:34,656

it was in collaboration with

766

00:44:34,756 --> 00:44:37,143

the Digital Office for Scottish local government.

767

00:44:37,655 --> 00:44:42,964

And the organisation really helped with recruitment,

768

00:44:43,064 --> 00:44:44,869

especially for our survey and focus groups,

769

00:44:44,969 --> 00:44:47,657

but they also brought their expertise,

770

00:44:47,757 --> 00:44:51,853

their perspective on how local government engage with data,

771

00:44:51,953 --> 00:44:54,960

and really guided us from a practitioner's point of view.

772

00:44:55,770 --> 00:44:57,329

So, here you can see on the screen,

773

00:44:57,527 --> 00:44:59,886

the benefits of the collaborations.

774

00:44:59,986 --> 00:45:02,304

So, bringing this variety of perspectives.

775

00:45:02,747 --> 00:45:06,979

And being informed by practitioners' expertise

776

00:45:07,386 --> 00:45:09,034

improved the quality of the research.

777

00:45:09,134 --> 00:45:13,219

And that's really something we've seen in our project

778

00:45:13,319 --> 00:45:15,718

and something that you should consider,

779

00:45:15,818 --> 00:45:18,516

I think, if you're doing research with local government.

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00:45:19,004 --> 00:45:21,052

It can also facilitate access to

781

00:45:21,152 --> 00:45:22,930

hard to reach organisations and communities.

782

00:45:23,030 --> 00:45:24,429

In our specific case,

783

00:45:25,627 --> 00:45:27,684

local governments aren't necessarily hard to reach

784

00:45:27,784 --> 00:45:31,651

but I think there are organisations that have limited resources

785

00:45:32,181 --> 00:45:35,599

and it's easier to engage with them

786

00:45:35,699 --> 00:45:38,189

if you have a gatekeeper that can introduce you

787

00:45:38,267 --> 00:45:44,553

and if you have someone who shows the relevance of your research for them.

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00:45:44,687 --> 00:45:48,064

So, that can really facilitate this access.

789

00:45:48,595 --> 00:45:50,894

And finally, it promotes knowledge exchange

790

00:45:50,994 --> 00:45:52,303

leading to change/innovation.

791

00:45:52,563 --> 00:45:56,682

I think it's very important to have this impact and applied research

792

00:45:56,782 --> 00:45:59,171

built into the design from the beginning

793

00:45:59,300 --> 00:46:02,880

and really make sure that the research questions you're examining

794

00:46:02,980 --> 00:46:06,715

and you're thinking of are relevant from an academic point of view

795

00:46:06,815 --> 00:46:09,185

but also from a practitioner point of view.

796

00:46:09,185 --> 00:46:12,474

And in our research, we drew on the findings

797

00:46:15,533 --> 00:46:19,501

and we made policy and practical recommendations

798

00:46:19,960 --> 00:46:22,690

for data practitioners in local government.

799

00:46:24,481 --> 00:46:27,948

So, quick tips here for collaborating with key stakeholders.

800

00:46:28,048 --> 00:46:30,300

So, identifying relevant partners.

801

00:46:30,400 --> 00:46:32,428

So, doing your homework and, basically, mapping

802

00:46:32,837 --> 00:46:37,484

your data ecosystem in local government or in Scotland

803

00:46:37,584 --> 00:46:40,173

or wherever the boundary of your research is.

804

00:46:40,883 --> 00:46:43,421

Defining the boundaries of your collaboration.

805

00:46:43,521 --> 00:46:47,289

So, you can have a memorandum of understanding from the start.

806

00:46:47,500 --> 00:46:51,508

Also, really defining the type of involvement and tasks that you require

807

00:46:51,608 --> 00:46:54,727

from your participants or your collaborators

808

00:46:54,923 --> 00:46:56,490

and the time that you would require.

809

00:46:56,590 --> 00:46:58,375

It's very important to be clear on that.

810

00:46:58,535 --> 00:47:01,723

And that would help you to set and manage expectations

811

00:47:01,991 --> 00:47:04,641

So, the specific role, the timeline of the project,

812

00:47:04,809 --> 00:47:08,357

when they can expect to have some of the output of the research,

813

00:47:08,457 --> 00:47:10,824

what the anticipated outcomes of the research are.

814

00:47:10,971 --> 00:47:15,269

All of this it's quite important for it to be said at the beginning of

815

00:47:15,369 --> 00:47:16,627

the collaboration.

816

00:47:16,988 --> 00:47:19,316

And finally, define the communication procedures

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00:47:19,416 --> 00:47:20,811

and collaborative tools.

818

00:47:21,129 --> 00:47:24,027

I think I mentioned that. So, using Teams, for example,

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00:47:24,127 --> 00:47:26,525

when it comes to local government is a must.

820

00:47:27,172 --> 00:47:29,771

But also defining, roughly, the number of meetings

821

00:47:29,871 --> 00:47:31,194

with the key contact person.

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00:47:31,294 --> 00:47:33,882

So, very practical details.