



# NEXT GEN Social Work

The technology is here - how do we catch up?

Jonny Hoyle – Development Lead Cath Ritchie – AI Ethics Lead Mark Peterson – Head of Data and Insight

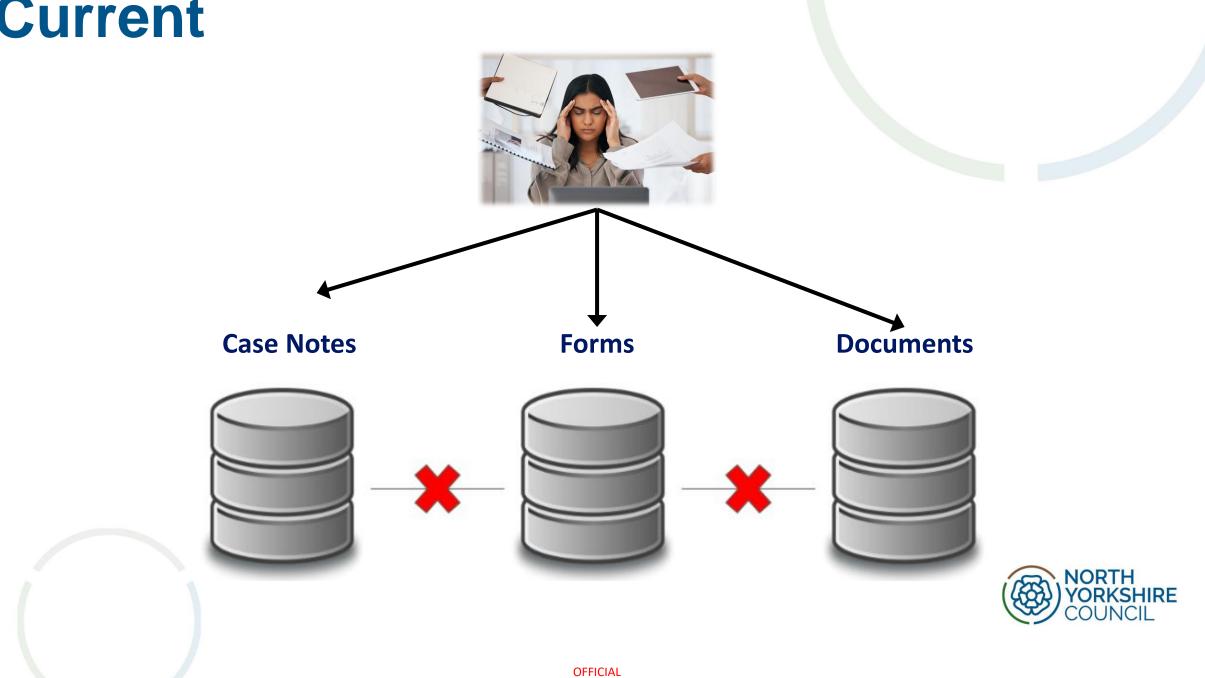
## **NYC Ethical Impact assessment**

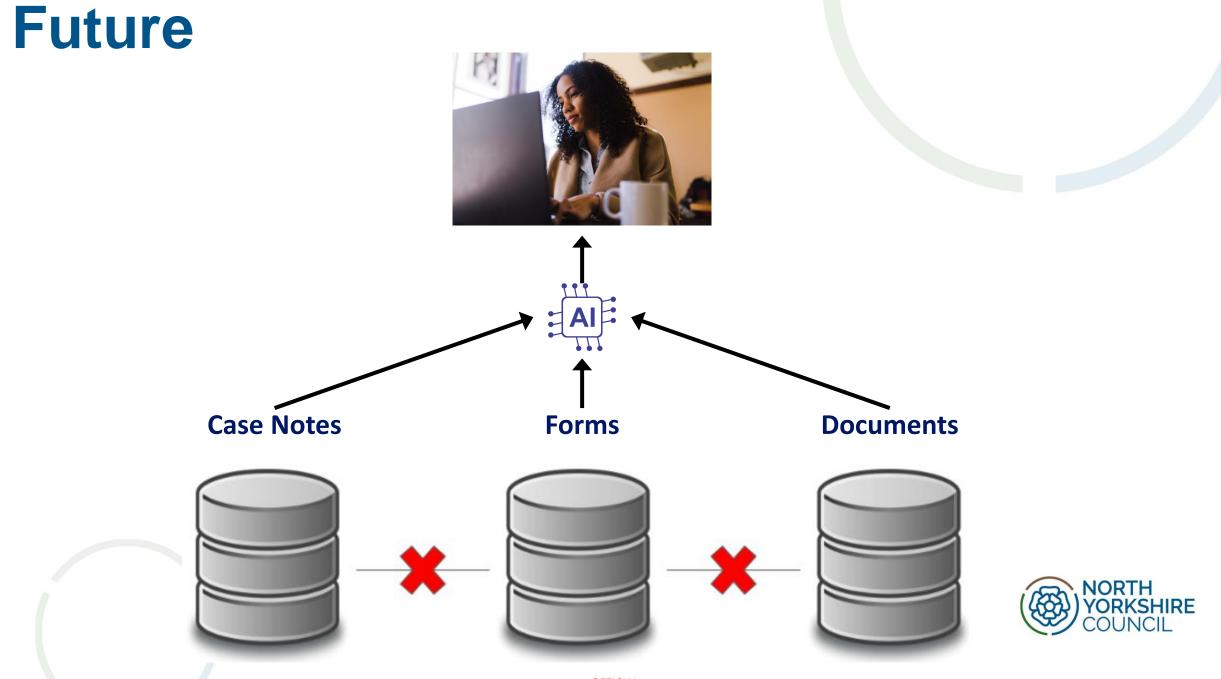
Ethical Impact Assessment tool in use to prompt and document a proactive and purposeful team conversation around ethics and inform decision making and service design. Informed by research and emerging best practice.

 Focusses not on what AI and emerging technologies can do for us, but what it should do for us



## Current





## It takes a village to raise a child

2000

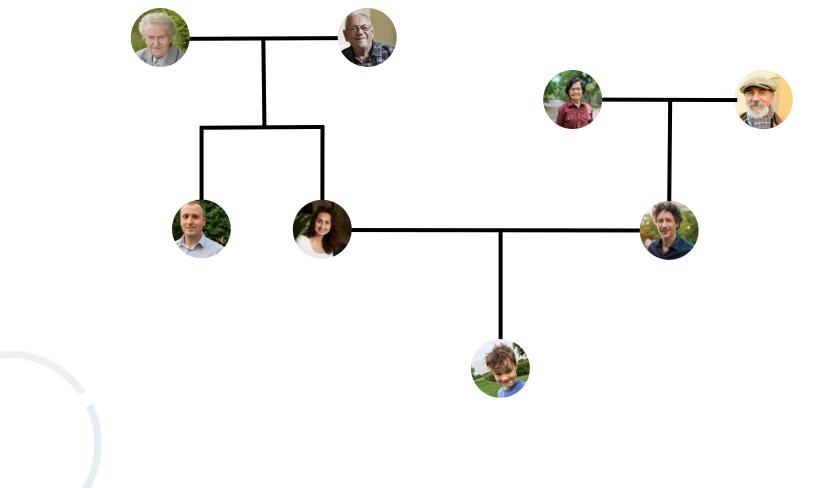


Tom is 6 - he is open to a Social Worker in a safeguarding team and has just been made the subject of a child protection plan



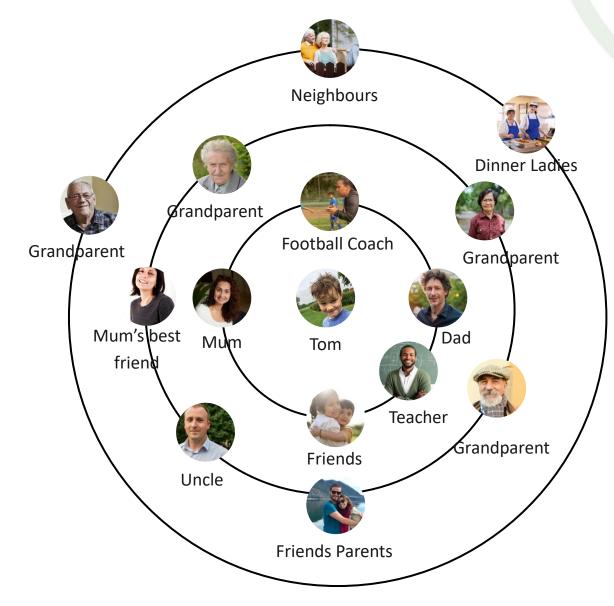


## **Genograms or Ecomaps**



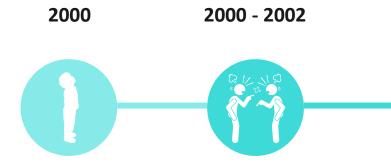


## **Genograms or Ecomaps**







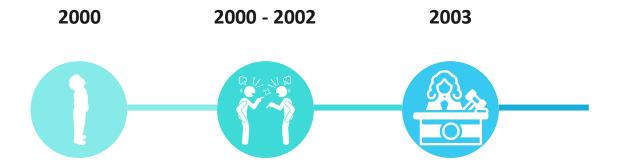


Tom's parents continue to drink alcohol and fight. Tom is experiencing neglect.

> NORTH YORKSHIRE COUNCIL



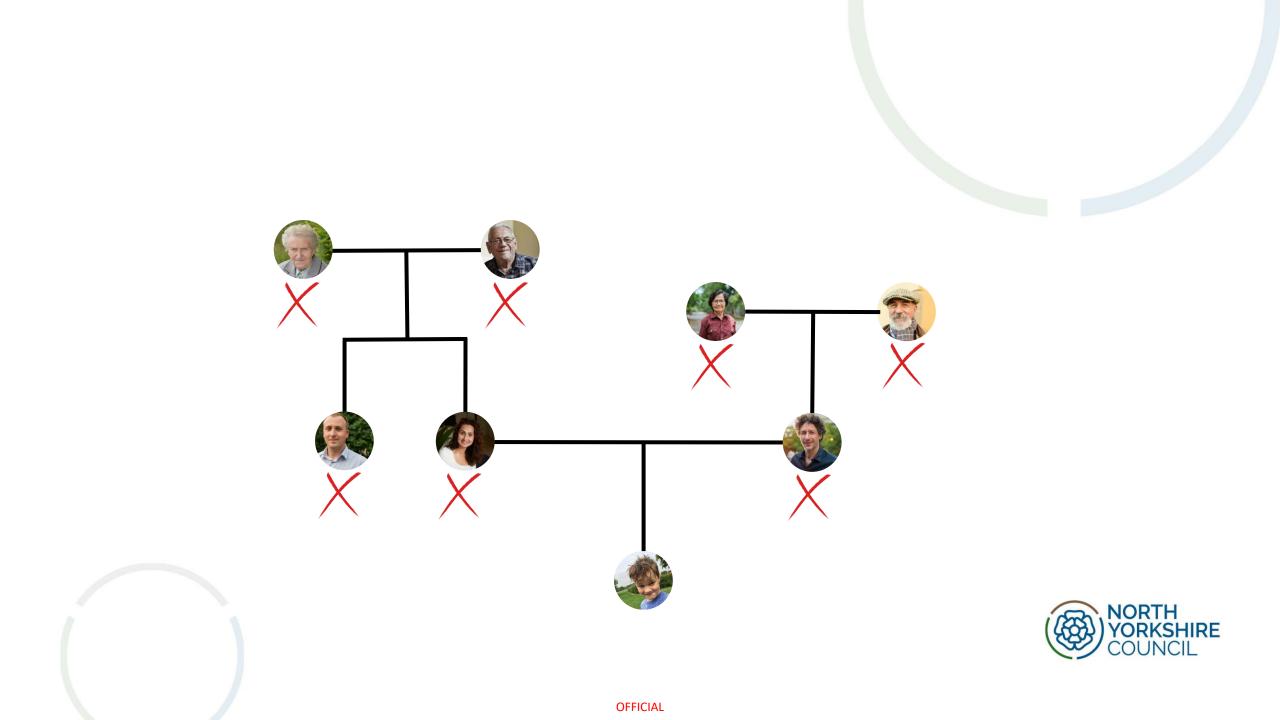


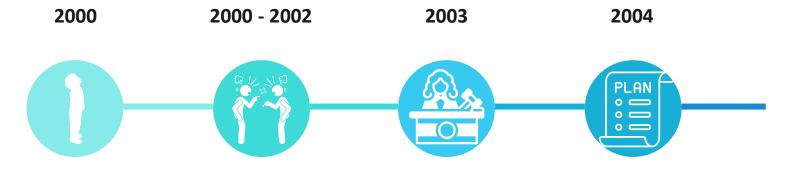


Tom's parents continue to drink alcohol and fight. Tom is experiencing neglect. The local authority apply to a court and ask for an Interim Care Order. Tom's parents are asked to identify family members who could care for Tom to assess during the proceedings







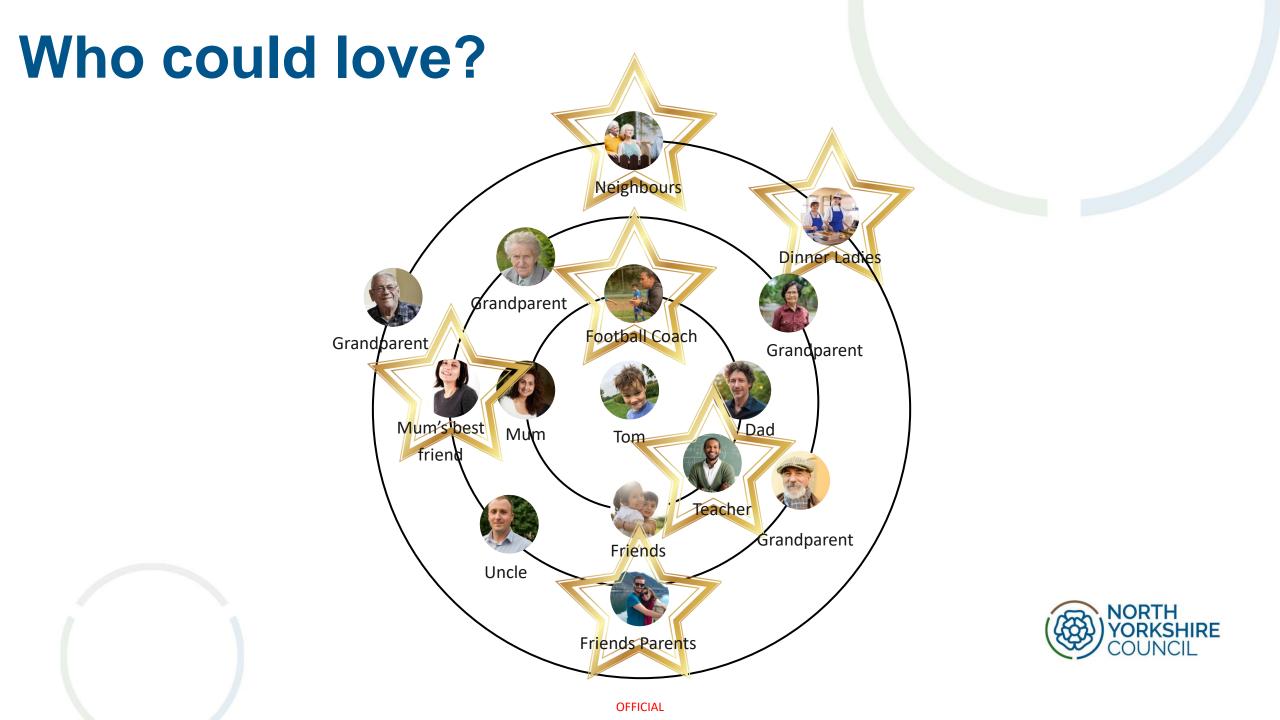


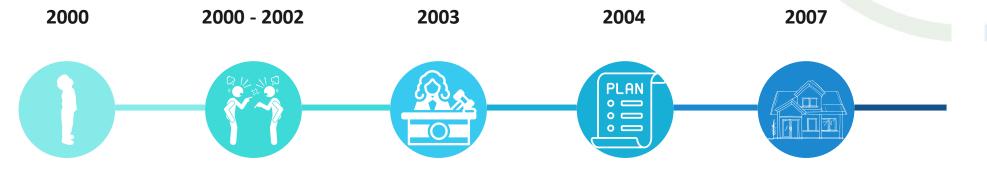
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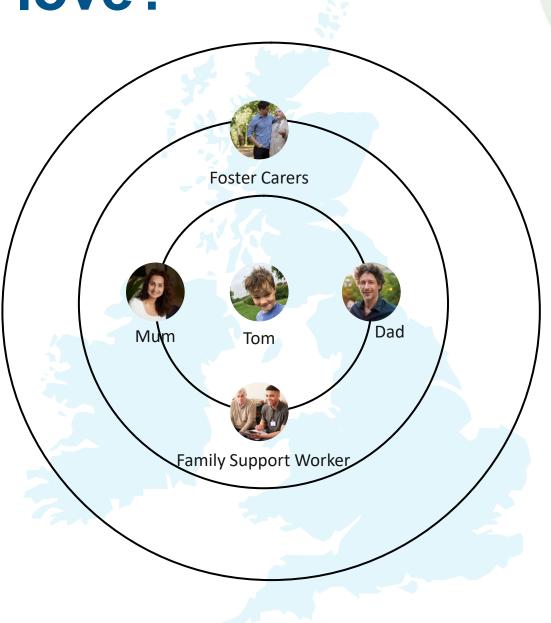
## Who could love?



No Football



Can't play with friends



OFFICIAL

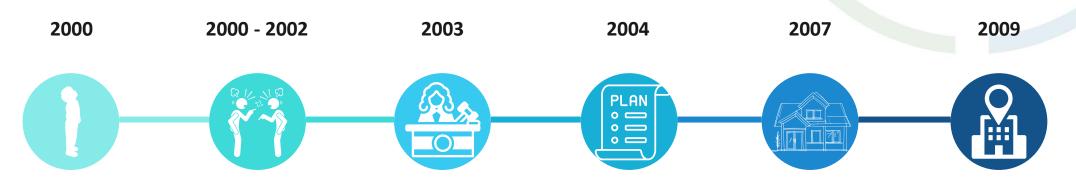
**BAB** New School



New Town



## It takes a village to raise a child



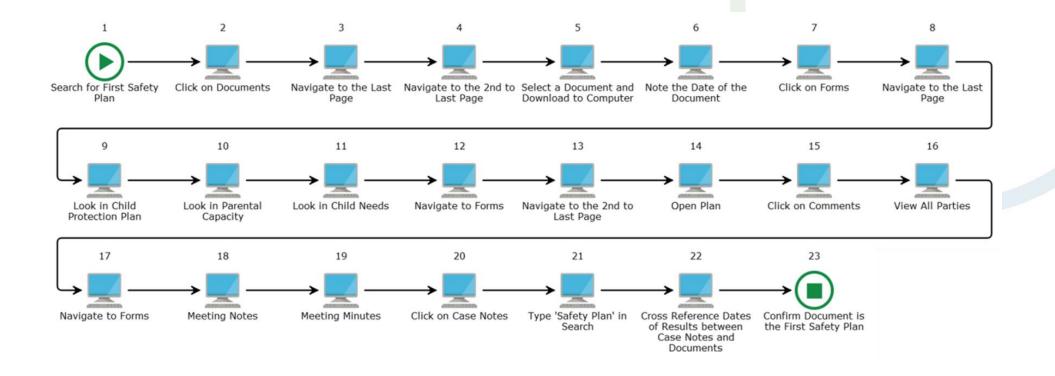
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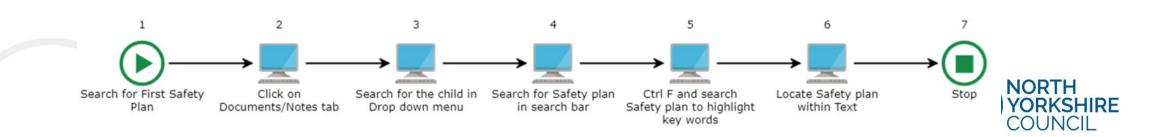








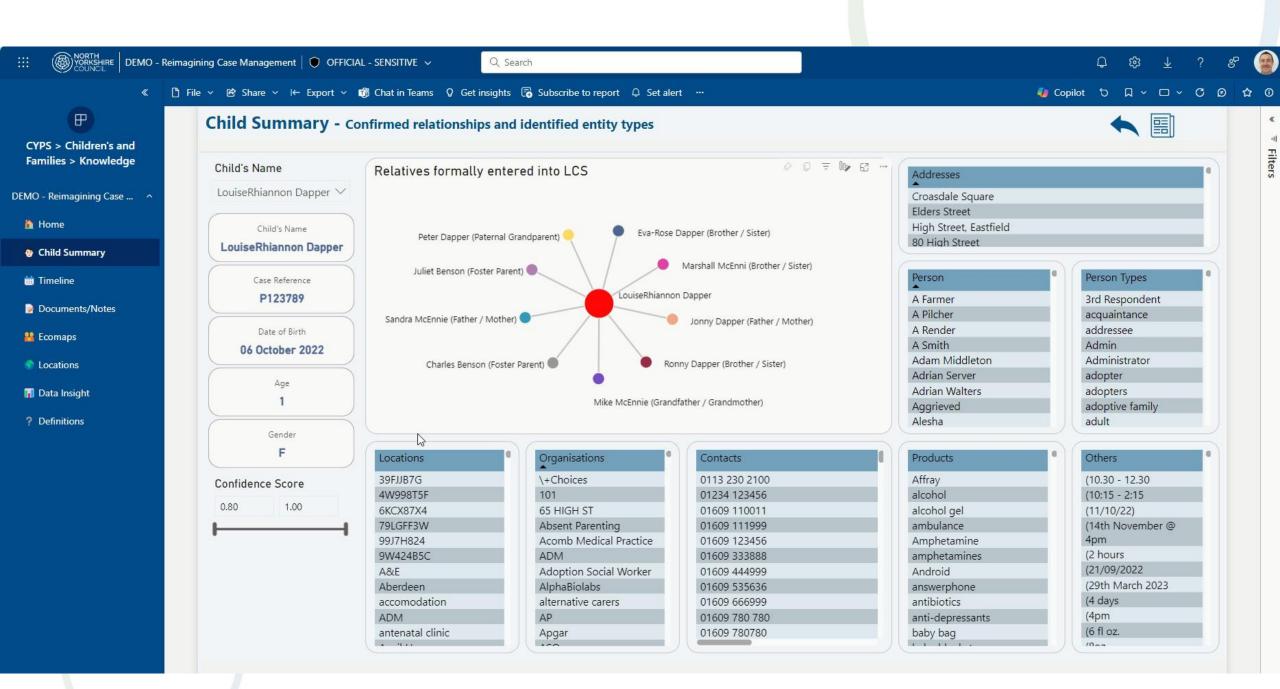
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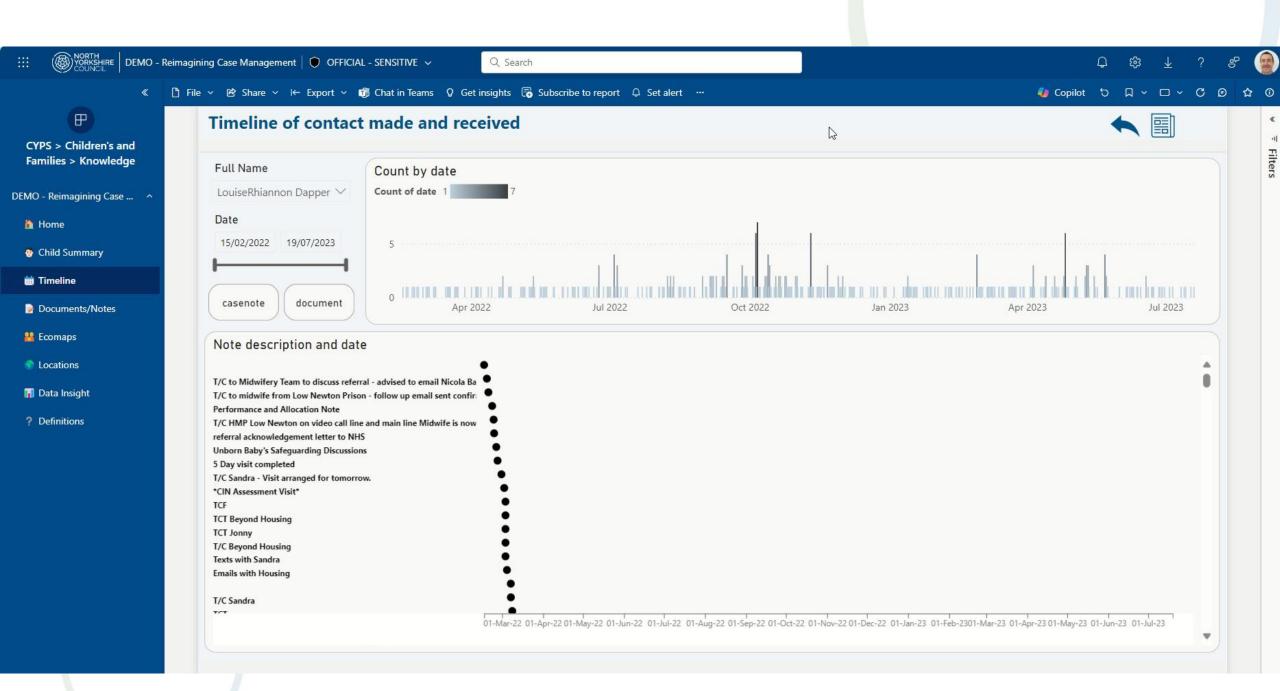




## Demo Knowledge Mining







Q Search

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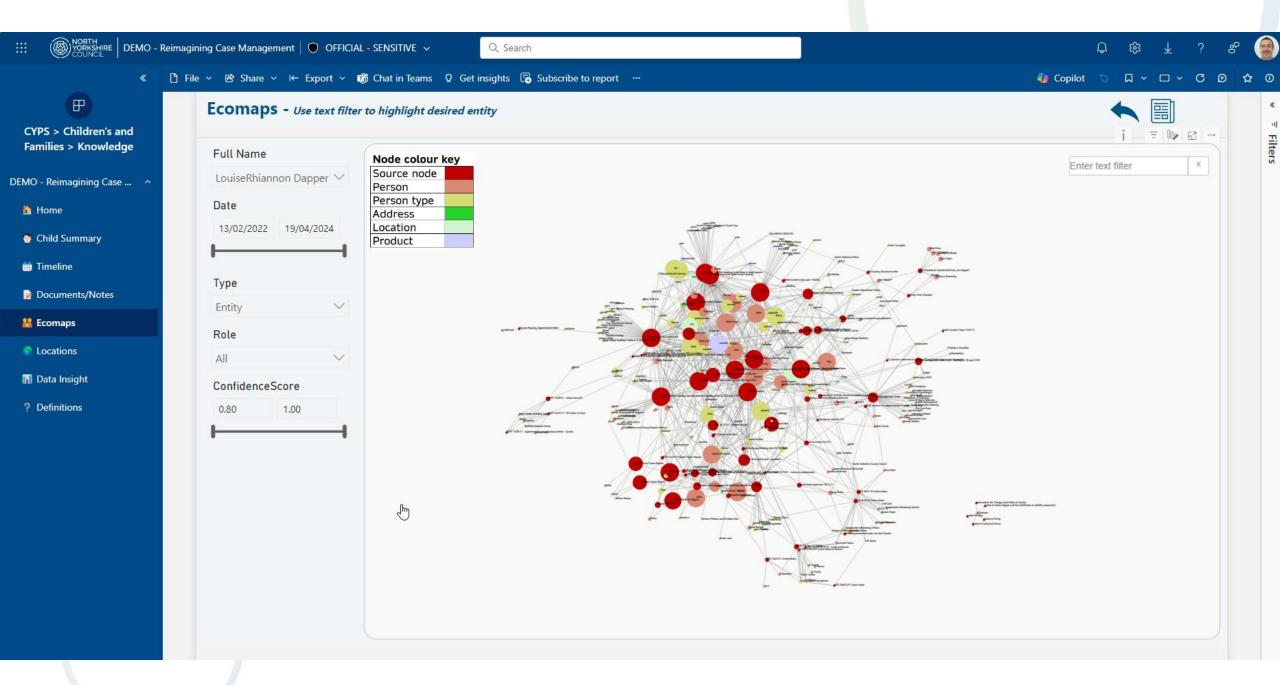
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### « 甲 **Document and Case Note summary** CYPS > Children's and Families > Knowledge Child's Name Date Text LouiseRhiannon Dapper ∨ DEMO - Reimagining Case ... ^ 15/02/2022 \*Decision: Family Assessment and Support Team\* 10:09:00 \*Rationale:\* Date MAST and the Midwife is worried that Sandra is pregnant. Sandra states that she has had 3 children who are not in her care. To be pregnant again A Home must be mixed emotions and a worry for Sandra. During screening, LCS records have been read and it would appear that Marshall who is now 6 may 15/02/2022 19/07/2023 have been Sandra's first child and the court decided in 2016 that he would be cared for by adoptive parents. It is not clear who the other 2 children Ohild Summary are. There is a reference to a Lottie born in 2016 who may have been open to services but is not on LCS in relationships and can not be found. There is also reference to a possible concealed pregnancy in 2017 but according to the system there was no confirmation. It is likely that the locality team will Timeline know more about the family dynamics and history and LCS needs to be updated to reflect this. document casenote This baby is due in June. Sandra has confirmed that she continues to be in a relationship with Jonny. She is also spending 2 weeks in prison and it is Documents/Notes unclear why but it would appear that this is how the pregnancy has become known. There is a worry that Unborn Baby may be harmed if Sandra was to be hurt by Jonny. There is a worry that previous assessment and courts have suggested that Sandra is not able to meet a babies needs and at Ecomaps present it is not clear if this has changed and what support Sandra, the father and baby may need. QX Health checks have been sought in order to try and establish if the generic teams are aware of the pregnancy outside of prison and if they are able to Locations share any clarifying information on how many children Sandra has. Health checks confirm that Sandra has three other children who are cared for by Notes Column Text Colum adopted parents (Lottie and Ronny not found on LCS/EHM so to be clarified and added by FAST during assessment. Health have confirmed that there Data Insight is no knowledge of Sandra's pregnancy and therefore there is a worry that this pregnancy has been concealed and medical oversight may not have been sought. ? Definitions results returned When considering the pre birth procedures a pre birth assessment is required. 17/02/2022 Email sent to 'Natasha.barker5@health.net' 569 13:08:00 Hi Natty, I have just had a chat with one of your colleagues who advised me to contact you via email. I am a Duty Social Worker in Salford and have received your referral for SE currently in Low Newton Prison. We would like to make contact with Mum to discuss the referral and gain consent to complete an assessment. Please may you contact me on Duty number on 01609 111999 to discuss the best way for us to make contact with Mum. Thank you. 18/02/2022 Hi Natty, 16:00:00 Thank you for all your support with this. As agreed during our telephone conversation we look forward to receiving contact details for the Wing/Prison and Family workers to discuss facilitating a visit or video call for Monday/Tuesday next week. I will let our Manager know Sandra is due to be released Thursday next week and we can arrange to see her at her Salford home during the video call on Monday or Tuesday

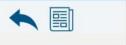


Q Search

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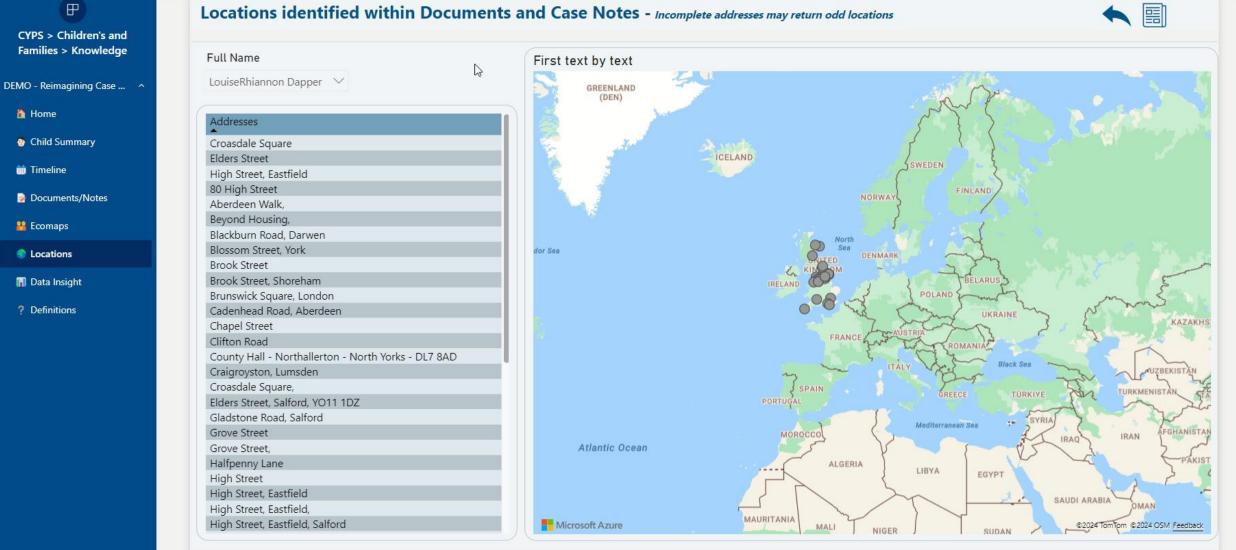
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Q Search

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₽ CYPS > Children's and Families > Knowledge

DEMO - Reimagining Case ... ^

🏠 Home

💮 Child Summary

🛗 Timeline

Documents/Notes

Ecomaps

Locations

👔 Data Insight

? Definitions

Full Name	Confidence Group	Person	Total
LouiseRhiannon Dapper $\smallsetminus$	□ .8089	398	398
Date	A Render	3	3
Date	Aggrieved	1	1
13/02/2022 19/04/2024	Baby McEnnie	2	2
	С	1	1
•	C Cloverfield	1	
	C&FSW	1	
casenote document	carer	1	
Lasenote	carers	1	1
	Clive West	1	
category	Clive West guardian	1	
3,	Dapper	4	4
Person 🗸	Downing	1	
Confidence Score	FC	1	
Confidence Score	First Names	3	
0.80 1.00	Foreshaw	9	9
63	FSW	1	
	Gertrude Guest	1	
	GP	1	
Confidence Group	H Bamford	1	
All	Holly Bamford	1	
	J	1	
	Jack Chateau	3	3
	Jade	1	1
	Jade Wensleydale	1	
	John	20	20
	Jon Dapper*	25	25
	Jonny Dapper	2	
	JS	1	1
	Total	11755	11755

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Data Insight - Returns counts and hierachy of found entities





### Up to 950% more than when

### performed manually

In the pilot workshops an activity designed to test and validate ecomaps was conducted. The goal was to compare and demonstrate how many person entities the AI could identify against a manual process. Work was also undertaken to assess the quality and accuracy of the autogenerated ecomaps.

The task involved asking attendees to identify people in a child's network by examining the documents and case notes available in the source system within a time limit of **ten minutes**. This was then compared with the autogenerated ecomaps, that are available instantly.

Team	Number of people listed in manual	entities identified	Number of unique entities*	% increase manual vs. unique entities identified by the tool
Front Door	6	537	63	950
Early Help	10	616	24	140
Adoption	6	537	63	950
Leaving Care**	10	3765	32	220

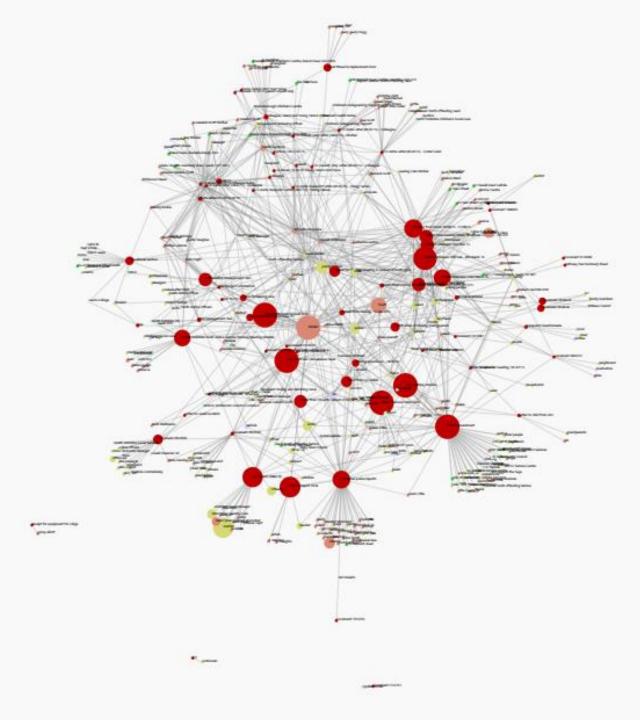
 Table 9: Table to compare manual and autogenerated ecomaps

 \*no data matching

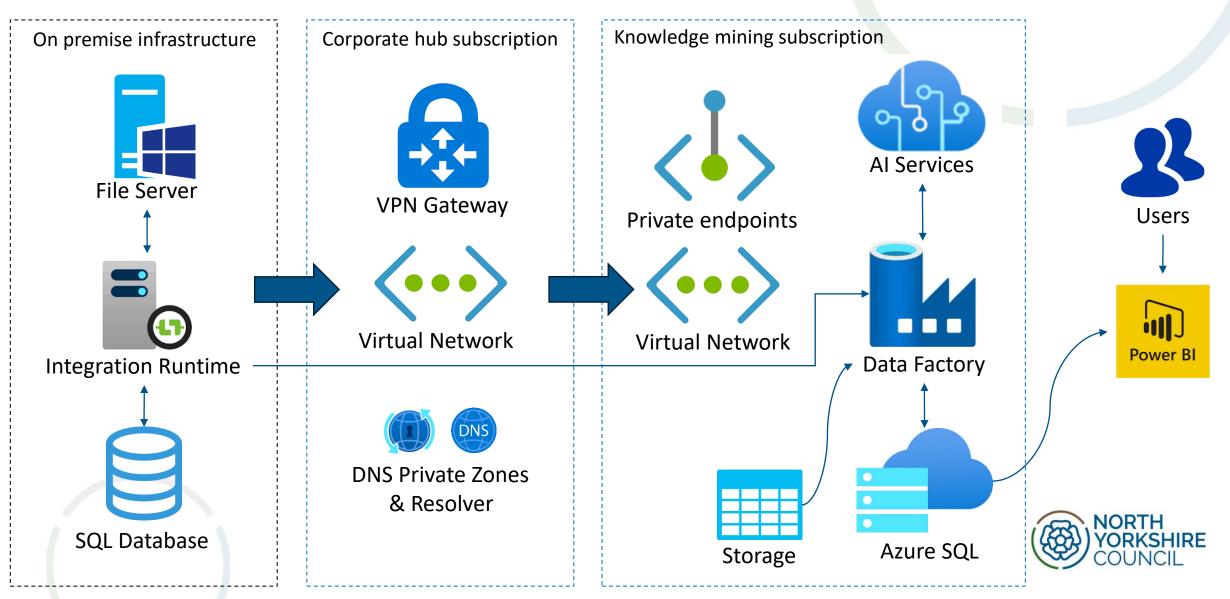
\*for this work the confidence score was set to one

\*\*attendee worked with person for 9 years

Task	Time using source system (seconds)	Clicks	Time using the tool (seconds)	Clicks	% Time saved in seconds
Finding a safety plan	180	14	15	5	94%

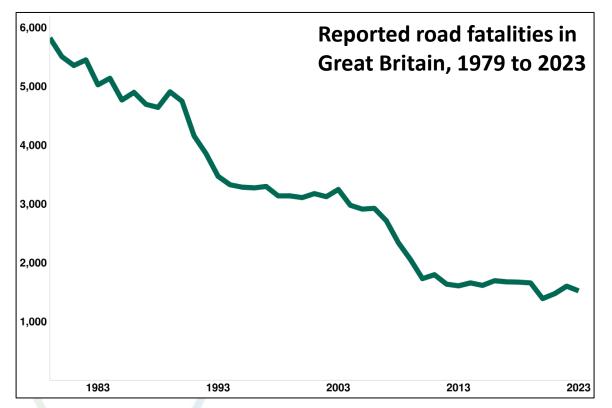


## **Technical Architecture**



## What if AI is wrong?

There is no world where AI will be right 100% of the time, because it depends on the information people provide it, and there is no world where people are right 100% of the time!



Cars are not 100% safe, but how many of you travelled here today in a car?



## Al isn't right or wrong

# It's the colleague that can read in seconds what a human would take hours, days or weeks.



It's not about changing the decision-making process; it's about increasing the transparency of the information to support it.



## **Future potential**

### Contextual Safeguarding

### Workforce Morale

### **Recruitment & Retention**

### Children's/Adults/Health

### Multi Authority Information Sharing



Super Single Views - Single

Source of Truth

## No one system holds the full picture...





