



Transforming Using AI Technology



Darcie and Ali “AI - Digital Talker”

Success so far

Building on a decade of Digital and Online Service Transformation, but with persistent 60% of phone channel usage

April 2023 – Derby City Council launched Darcie and Derby Homes launched Ali as web Digital Helpers!

May 2023 – Derby City Council and Derby Homes launched Darcie and Ali on the contact centre telephony solution

First council in the UK to replace its main switchboard with a phone-based AI assistant proficient in council services

The original business case surrounding the implementation was built around obtaining a deflection of 21% of inbound contacts

Current performance 43% deflection, over 750,000 questions, exceeding business case by 100%

Reduction of 40% in customer service calls

Designed around automatically dealing with the Top 1000 of all Council Calls, saved initial £200,000 annual - MTFP target

Further saving allowing re-investment in complex calls and maintained legacy channels

Enabling additional savings in secondary service adjustment and opening hours

Continues to learn and improve using cutting edge AI

Always remains ethical and under the control of the Council

Human always in the loop where needed

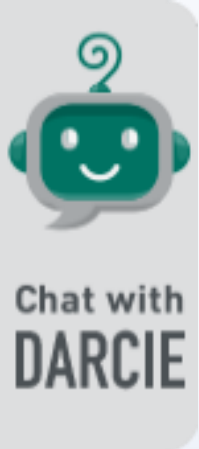


Chat with
DARCIE

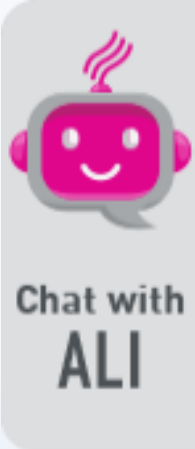


Chat with
ALI





The next challenge



Reality

- Darcie and Ali considered strategic foundation technology for the future
- Emergence of Generative AI, creates a “generational” opportunity
- Unprecedented Financial challenges of Council and Local Government Sector
- Protection of services is a priority of politicians

So, how do we meet the challenges to;

1. Quickly identify the scale and size of the opportunity of G-AI and the business case
2. Quickly get consensus and a corporate mandate for an organisation wide, savings prioritised, programme with no opt-outs or “no go” areas
3. Assure the Council in respect of risk of pioneering and not following
4. Adopt AI transformation as the key technology for saving the Council and Services



FROM CONVERSATIONAL AI TO GENERATIVE AI

Generative AI such as ChatGPT is able to understand complex information in a way that mirrors human capability, in addition it can respond with either original AI generated content, prescribed content or mixture of both

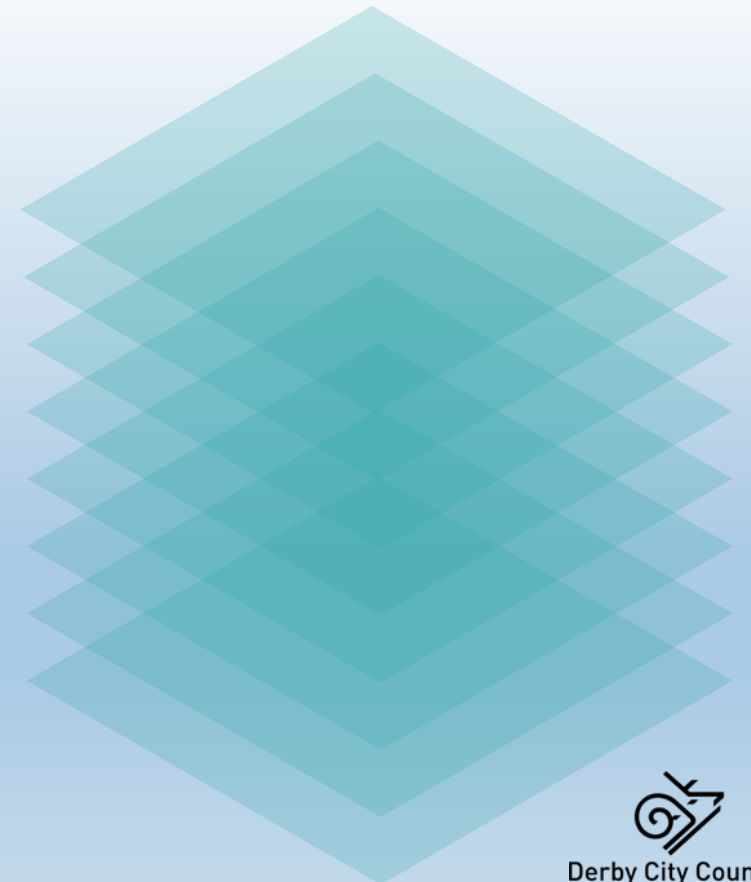
Conversational AI before Generative AI

Ability to understand
and respond



- Ability to understand
- Ability to respond
- Ability to generate content
- Subject matter expertise
- Ability to create automations
- Ability to remember context
- Ability to apply ethical constraints
- Ability to read & understand data

Generative AI Capabilities



WHAT CAN GENERATIVE AI DO FOR THE COUNCIL?

Interactive Assessments: Analyses inputs to judge user abilities, skills, or requirements via interactive chat.

Content Generation: Produces captivating, informative, and contextually suitable written or spoken content.

Interactive Triage: Distinguishes and orders issues or problems for swift resolution via interactive conversation.

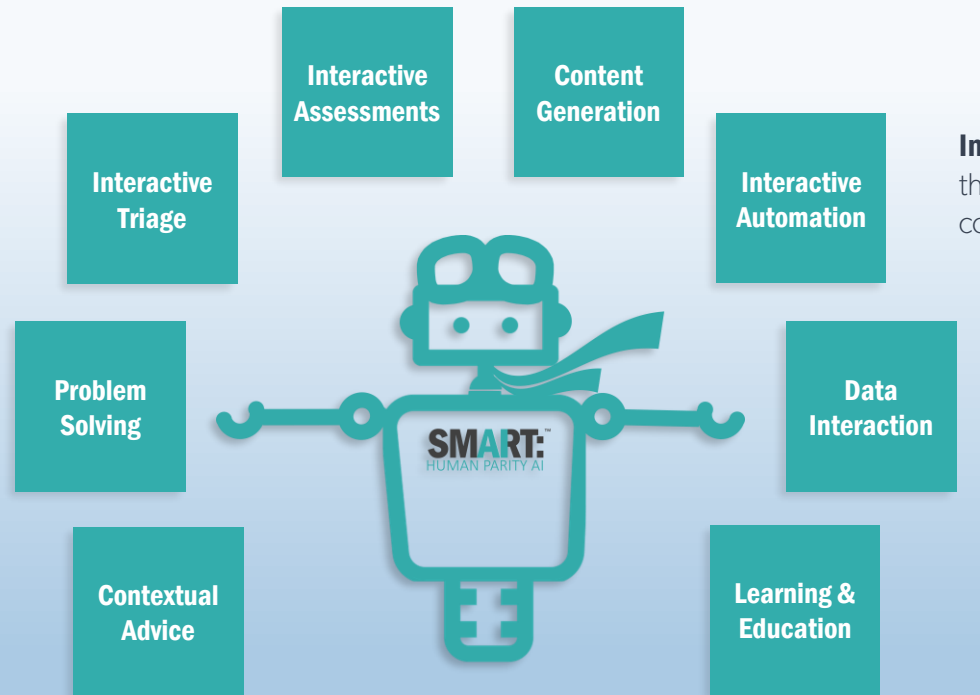
Interactive Automation: Automates monotonous tasks through understanding and responding to user commands interactively.

Problem-Solving: Proposes solutions to complex problems by utilising broad knowledge and reasoning capabilities.

Data Interaction and Generation: Interprets, handles, and generates data to deliver insights or projections.

Contextual Advice: Supplies relevant suggestions and guidance related to the user's specific circumstance.

Learning and Education: Enables comprehension and education of novel concepts via engaging, personalised dialogues.



SMART
EMAIL



SMART
SOCIAL



SMART
PHONE



SMART
CHATBOT



SMART
LIVE CHAT



MICROSOFT
COPILOT



MICROSOFT
TEAMS



CREATING AI SPECIALIST COPILOTS

Automating the straight-forward work and “heavy lifting” to inform human decisions and leave humans to do what only humans can!



CUSTOMER SERVICES COPILOT

Customer service automation enhances accessibility, response time, and efficiency, providing round-the-clock access, streamlined payments, simplified applications, and improved care triage. Potential savings for councils could reach up to 50% across various areas



ADULT SOCIAL CARE COPILOT

AI integration in adult social care enhances user experience and outcomes, boosts efficiency, and improves care worker skills. Prudently applied, AI could potentially cut costs by 10-25%, without compromising service quality or user needs



CHILDRENS SERVICES COPILOT

Integrating AI into Children's Services can transform operations: reducing paperwork, providing faster responses to families, improving case handling and teamwork, potentially leading to 5-20% time and cost savings



STAFF COPILOT

Copilot can dramatically enhance productivity, streamline workflows, and improve service quality. It could yield estimated cost savings between 5-15%, while facilitating better information sharing, personalised training, and efficient recruitment processes



IT SUPPORT COPILOT

Copilot IT support cuts costs by 10–20% By handling common queries, it reduces human resource expenses. Operating 24/7, it avoids overtime costs. By pinpointing recurring IT issues, potential expensive setbacks are prevented. Overall, AI streamlines processes and offers financial benefits.



AI TECHNOLOGY LANDSCAPE

UTILITY AI FEEDS



CoPilot



ChatGPT (Azure OpenAI)



Azure Cognitive Services



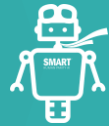
3rd Party LLM

CHANNELS



Use cases needing AI

Internal
External



Organisational Language Model (OLM)

CHANNELS



AI output with local context & content

Data telemetry for model improvement

Your Information

Your Information

Your Vocabulary

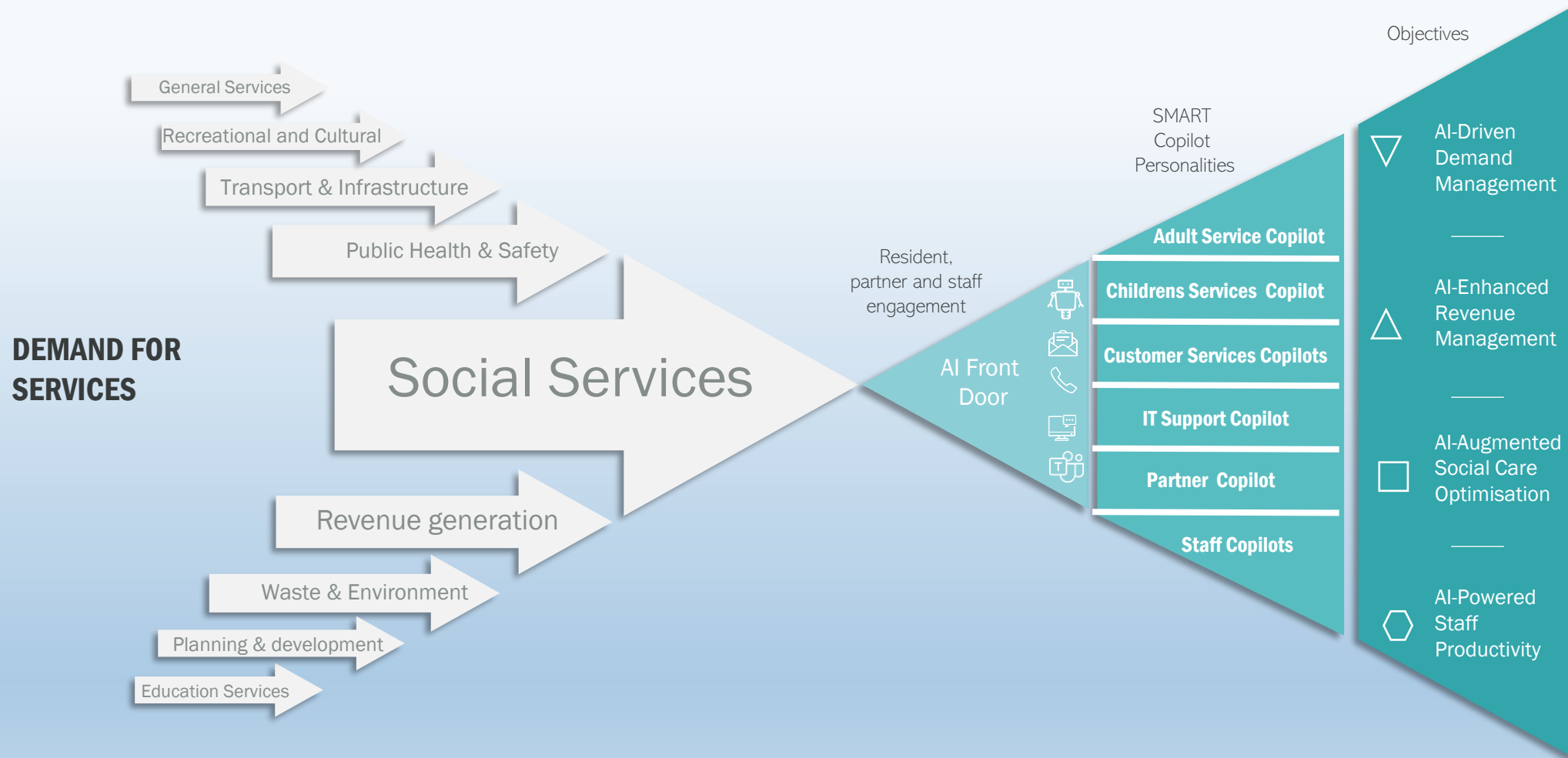
Your Vocabulary

Your Governance

Your Systems

**ORGANISATION
SPECIFIC
CONTEXT &
CONTENT**

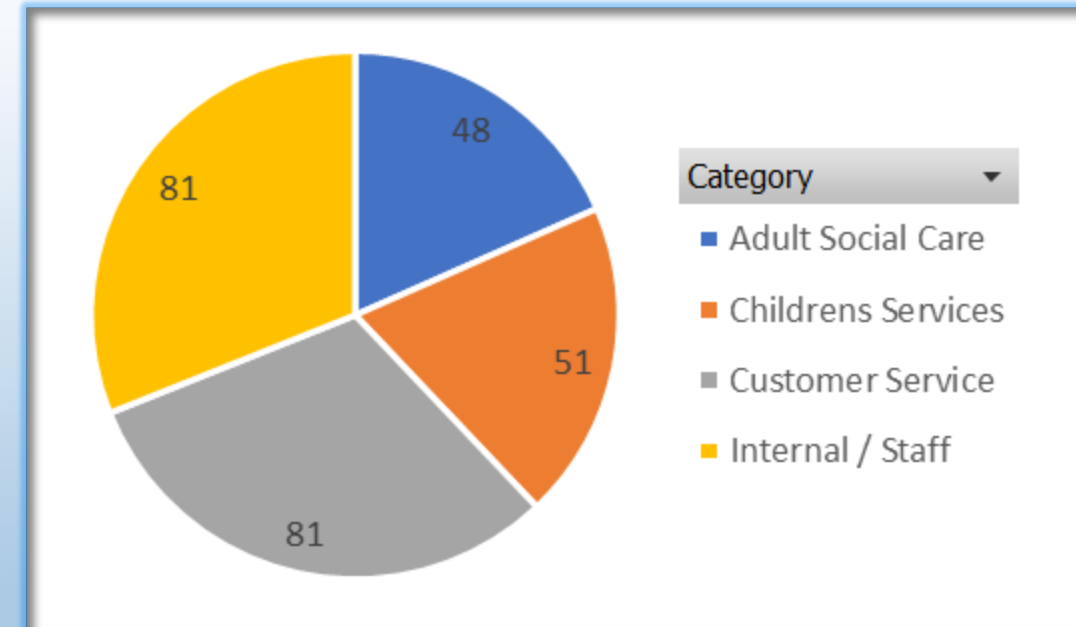
AI SERVICE LANDSCAPE



BUSINESS CASE & OPPORTUNITIES

ART OF THE POSSIBLE ENGAGEMENT

- ✓ **44** planning, workshop & feedback sessions completed
- ✓ Over **45** hours of collaborative interaction
- ✓ **261** AI opportunities qualified
- ✓ **54** AI solutions proposed
- ✓ Professional, service, and specialists all represented
- ✓ External industry verification
- ✓ Financial expert verification



261 USE CASES FOR AI

ASC Enquiries	Provider Offers	Digital Assistant - Social Media	Homes Enquiries	ETL Data Matching	Scheduling Visits	Fostering Enquiries	FOI Requests	Historical Figure Chatbot	Quality Visit Self Audits	Enrolment Tracking	Asset Management	ASC Sign Language	Pre-Discharge Planning	Bin Contamination
ASC Citizen Referral & Initial Assessment	Service Contracts	Citizen Engagement Analysis	Homes Enquiries Mailbox	Conversational Analytics	Data Review & Summarisation	Fostering Applications	Data Redaction-Digital	Library Enquires	Certificate Management	Waiting List Skill	IT FAQ & Document Generation	Pre-Discharge Planning	Care Reviews	Waste Vehicle Efficiency
ASC Enquiries (E-Mail)	Market Service Analysis	Council Tax Assessments	Complaints & Compliments	Process Mining	Outbound Data Chasing & Gathering	Fosterer Analytics	DPIA Requests	Book Purchasing Forecasts	Safeguarding Referrals	SEND Enquiries	Predictive IT Analytics	Care Reviews	Care Review Planning	Attendance Management Notifications
ASC Referral Status	ASC Professional Referral & Initial Assessment	Debt Collection	Ali F2F User Experience	KPI & Analytics Generation	Guidance Generation	Fostering Application Updates	IG Internal Queries	Training Content Generation	Safeguarding Reviews	Referrals & Initial Assessments	IT Automated Access Management	DOLS Referrals and Initial Assesment	Resource Scheduling	Attendance Management Analytics
Direct ASC Translation	ASC Business Support (E-Mails)	Customer Service Enquiries	Ali Multi-Lingual	KPI & Analytics Generation	Facilities Internal Queries	Repairs Forecasting	IG Proactive Publications Forecasting	Job Evaluation	Safeguarding Trends & Risk Profiles	Referral Updates	Automated IT desktop support	Care Review Planning	Benefits Mangament	Automated Fine Identification
Direct ASC Sign Language	Urgent Out of Hours	Customer Service Mailbox	Homes Repairs	Debt Data Consolidation & Recognition	Facilities Skill	Repair Scheduling	IG Mailbox	Parking Services Enquiries	Safeguarding Enquiries	SEND - Internal Queries	Adult Care Assesments	ASC Resource Allocation (RAS)	Meeting Minutes & Actions	StreetPride Internal
Benefits Auto-Assessments	Actual Provider Services	Customer Service Forecasting	Council Tax Requests	Debt Analysis	Finance Internal Queries	Bookings Skill	FOI Updates	Parking Services Mailbox	Safeguarding Inbox	SEND E-Mail Inbox	Continuing Health Care Assessments	CS Enquiries	Court Document Summarisation	Staff Training
Benefits Manual Assessments	Commissioned Care Plan Improvements	Gold Card Applications	Deaf Services	Consolidated Debt Chasing	Death Notifications	HR Internal Queries	IG External Queries	Debt Collection	Safeguarding Referrals	Support Plans	DOLS - Adult Mental Capacity Assessments	CS Citizen Referral & Initial Assessment	Placement Matching	Trading Standards Enquiries
Supplier Change of Details	Homes Internal Queries	Bin Skill	Bookings Skill	Debt Horizon Planning	Debt Collection	Appraisals	IG Proactive Publication Generation	Performance Insights	Safeguarding Reviews	Funding Requests	ASC Internal	CS Enquiries (E-Mail)	Youth Transition	Trading Standards Analytics
Blue Badge Requests (Central)	External Content Generation	Parking Permits	Fraud Detection	Debt Collection	Adult Financial Assesments	Employee Performance	Subject Access Request Requests	Horizon Planning	Safeguarding Enquiries	Panel Recommendations	CS Internal	CS Referral Status	Adoption Enquiries	Data Review & Summarisation
Blue Badge Updates	Internal Comms	Complaints & Compliments	Street Cleansing Notifications	Cabinet Papers	Financial Self Assessments	Job Descriptions & Job Posts	Breach Assessments	Performance Insights	School Enquiries	SEND Forecasting	DOLS - Adult Best Interest Decisions	DOLS Referrals and Initial Assessment	Home to School Transport	Outbound Data Chasing & Gathering
Blue Badge	Digital Assistant - Social Media	Darcie F2F User Experience	Highways Notifications	DMC Internal Queries	Property Sale Tracking	CV Vetting	Subject Access Request Processing	Press Summary	School E-Mail Mailbox	IT Assistant	DOLS - Childrens Best Interest Decisions	Continuing Health Care Assessments	Intelligent Bins	
Bookings Skill	External Content Generation	Darcie Multi-Lingual	Trees Notifications	Physical Mail Categorisation	Death Notifications	Employee Onboarding	DPIA Processing	Provider Improvements & Suspensions	Schools - Internal Queries	IT Ticketing (New)	DOLS - Children Mental Capacity Assessment	CS Translation	Bulky Waste Forecasting	
Blue Badge Requests (Direct)	Social Media Management	Pest Services Requests	Bulky Collection Requests	Environmental Health Enquiries	Fleet Optimisation	Attendance Management Notifications	Data Redaction - Handwritten	Priority Care Visits	SEND Admissions	IT Ticketing (Update)	Care Forecasting	CS Sign Language	Graffiti Management	
Brokerage Offers	Internal Comms	Registry Services Skill	Bereavement Services	Environmental Health Analytics	Fleet Optimisation	Staff Scheduling	Legal Internal Queries	Remote Quality Assessments	Admission Processing	IT Starters, Leavers & Movers	ASC Translation	CS Resource Allocation (RAS)	Graffiti Analysis	

AI TRANSFORMATION – 18 MONTH PROGRAMME

Phase 1

Phase 2

Phase 3

4 Months

Save £5.85M

8 Months

Save £5.75M

6 Months

Save £0.65M

Adult Social Care
External Copilot

Wider Staff Copilot
Debt Management

Childrens Services
External Copilot

Revenue & Benefits
Skills

Information Governance
IT



Customer Service
Copilot

Adult Social Care
Internal Copilot

Customer Service
Additional Skills
Derby Homes
Copilot

Childrens Service
Internal Copilot

Business Change and Benefit Realisation Management



MINIMUM SAVINGS OF £12.25M

Business Area	Minimum Savings
Adult Social Care	£8,900,000
Children's Services	£950,000
Customer Services	£1,000,000
Wider Council Staff	£500,000
Debt Management	£900,000
Total	£12,250,000



SAVINGS TARGETED WITHIN 24/25 MTFP

- **People Services – AH:** AI and Occupational Therapy led reviews of community care packages **-£2.904m**
- **People Services – AH:** Use of AI to reduce the need for residential placement - keeping clients in the community **-£0.125m**
- **People Services – AH:** Use of AI to allow Citizens & Professionals to obtain FAQ responses, signposting to services, self-assessment and create enquiries & notifications **-£0.050m**
- **People Services – AH:** Use of AI - outbound proactive chasing of financial debt. The solution is anticipated to generate improved recovery of the existing debt **-£0.210m**
- **People Services – CYP:** Use of AI - reduction in 3rd party translation costs through the ability to translate documents within the AI solution **-£0.025m**
- **Chief Executive's:** Use of AI - outbound proactive chasing of Council tax debt. The solution is anticipated to generate improved recovery of the existing debt **-£0.336m**
- **Council-Wide:** AI Management of Customer Service enquiries, filtering and signposting responses, increased Citizen self-service through new skills to handle most common complex tasks **-£0.275m**



WHERE DO THE SAVINGS COME FROM?

Reducing cost of commissioned care packages and placements – by enabling more regular reassessment and right sizing

Increasing access to benefits to self-fund care

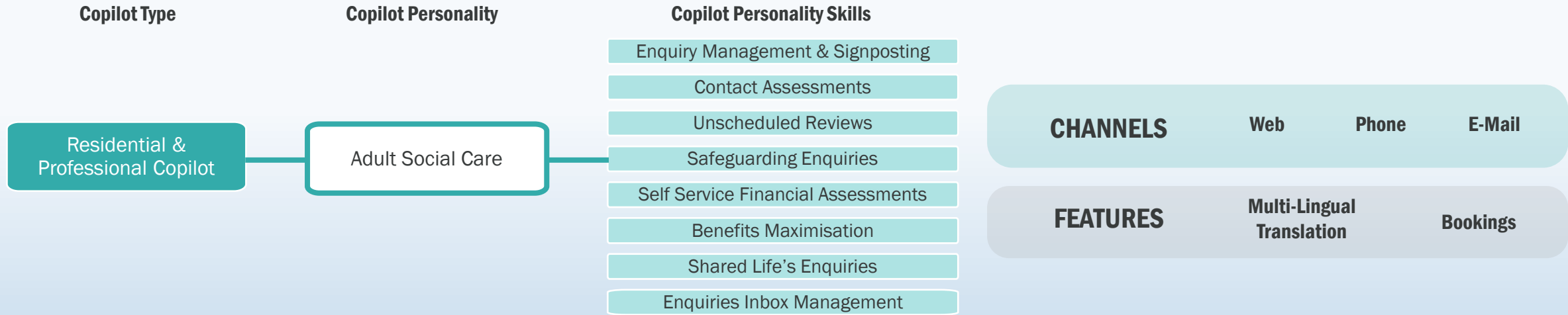
Increasing income through ethical and effective recovery of debt

Automation savings aligned with vacancy management

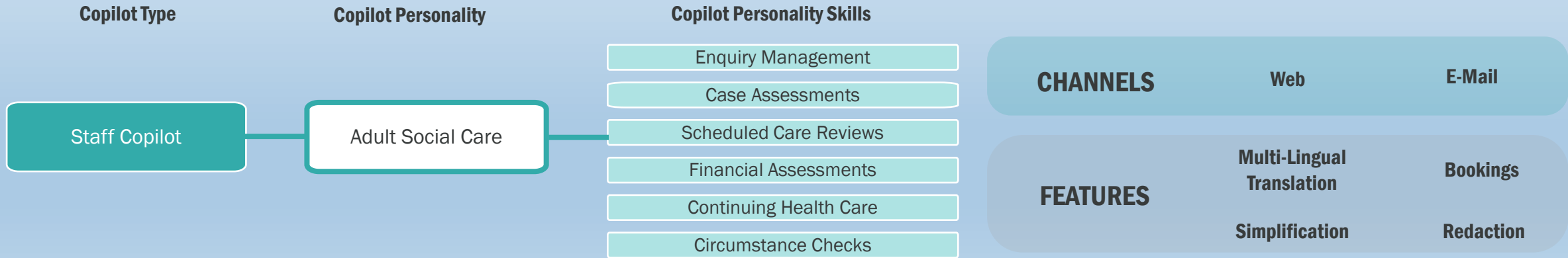


SPECIALIST COPILOTS – ADULT SOCIAL CARE

EXTERNAL COPILOT

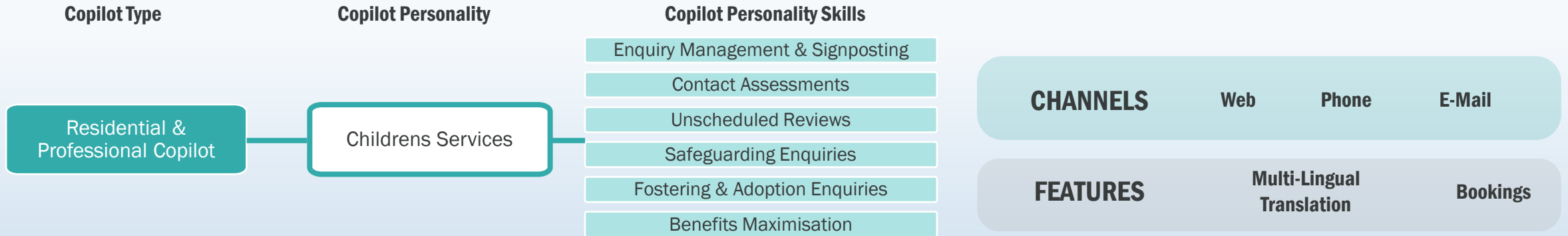


INTERNAL COPILOT

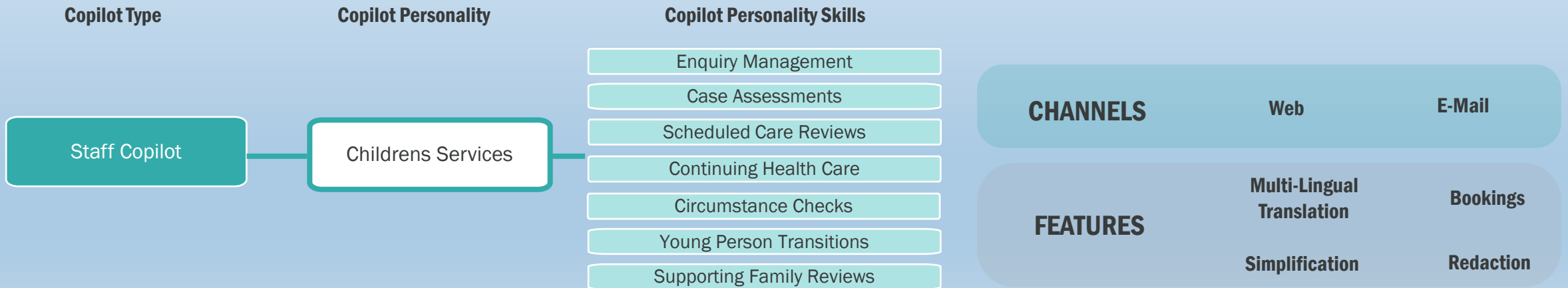


SPECIALIST COPILOTS – CHILDREN’S SOCIAL CARE

EXTERNAL COPILOT

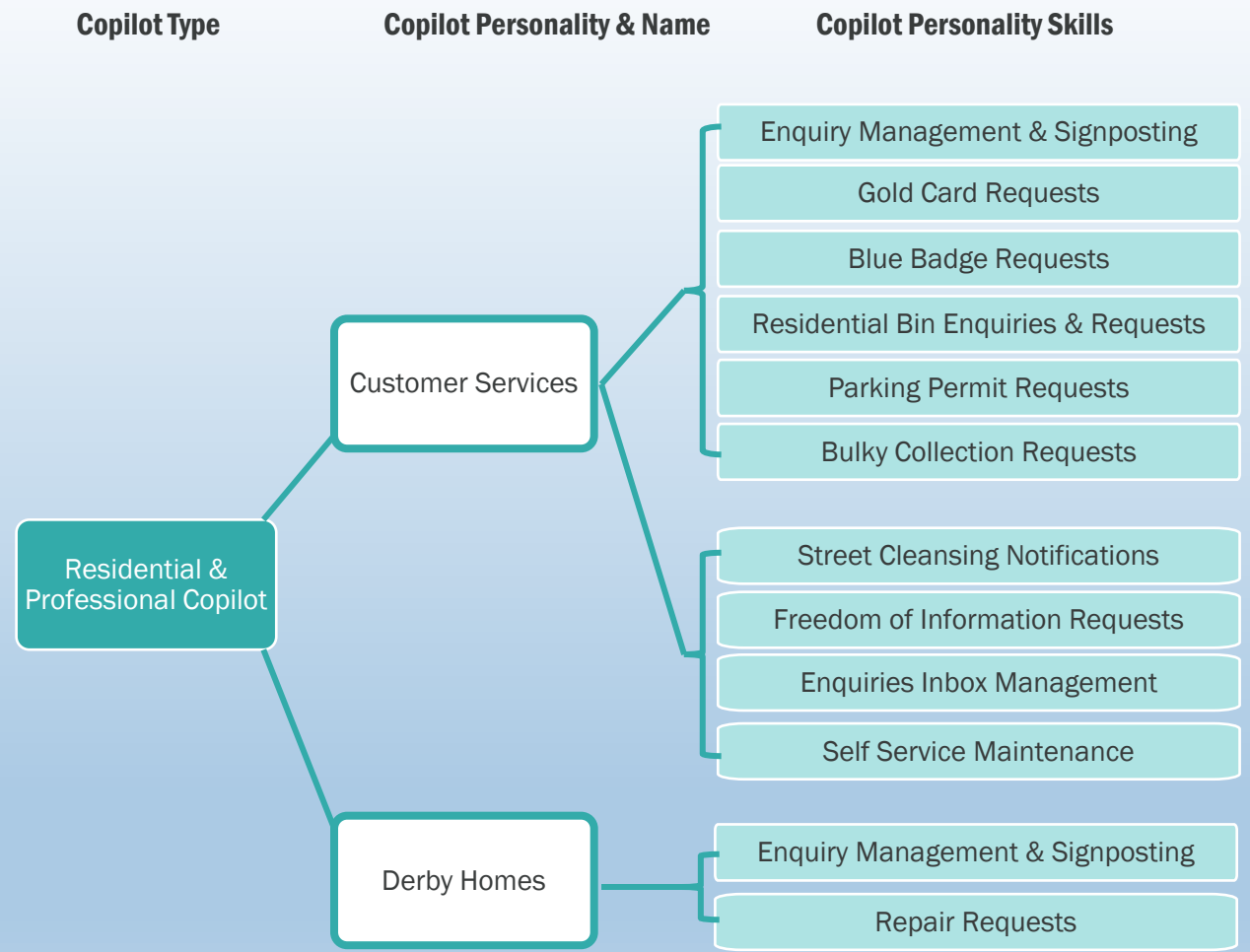


INTERNAL COPILOT



SPECIALIST COPILOT – CUSTOMER SERVICES

EXTERNAL COPILOT



CHANNELS	Web	Phone	E-Mail
FEATURES	Multi-Lingual Translation	Bookings	

SPECIALIST COPILOT – INTERNAL

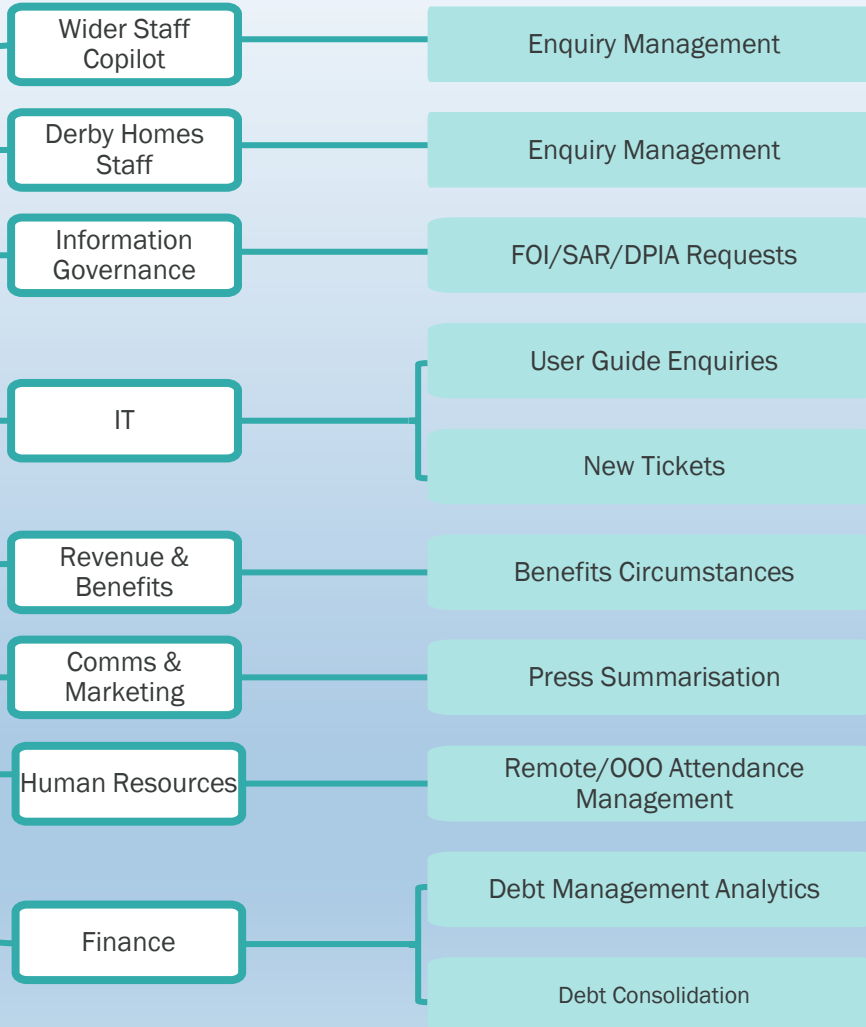
INTERNAL COPILOT

Copilot Type

Copilot Personality & Name

Copilot Personality Skills

Staff Copilot



CHANNELS

Web

Phone

E-Mail

FEATURES

Multi-Lingual Translation

Redaction

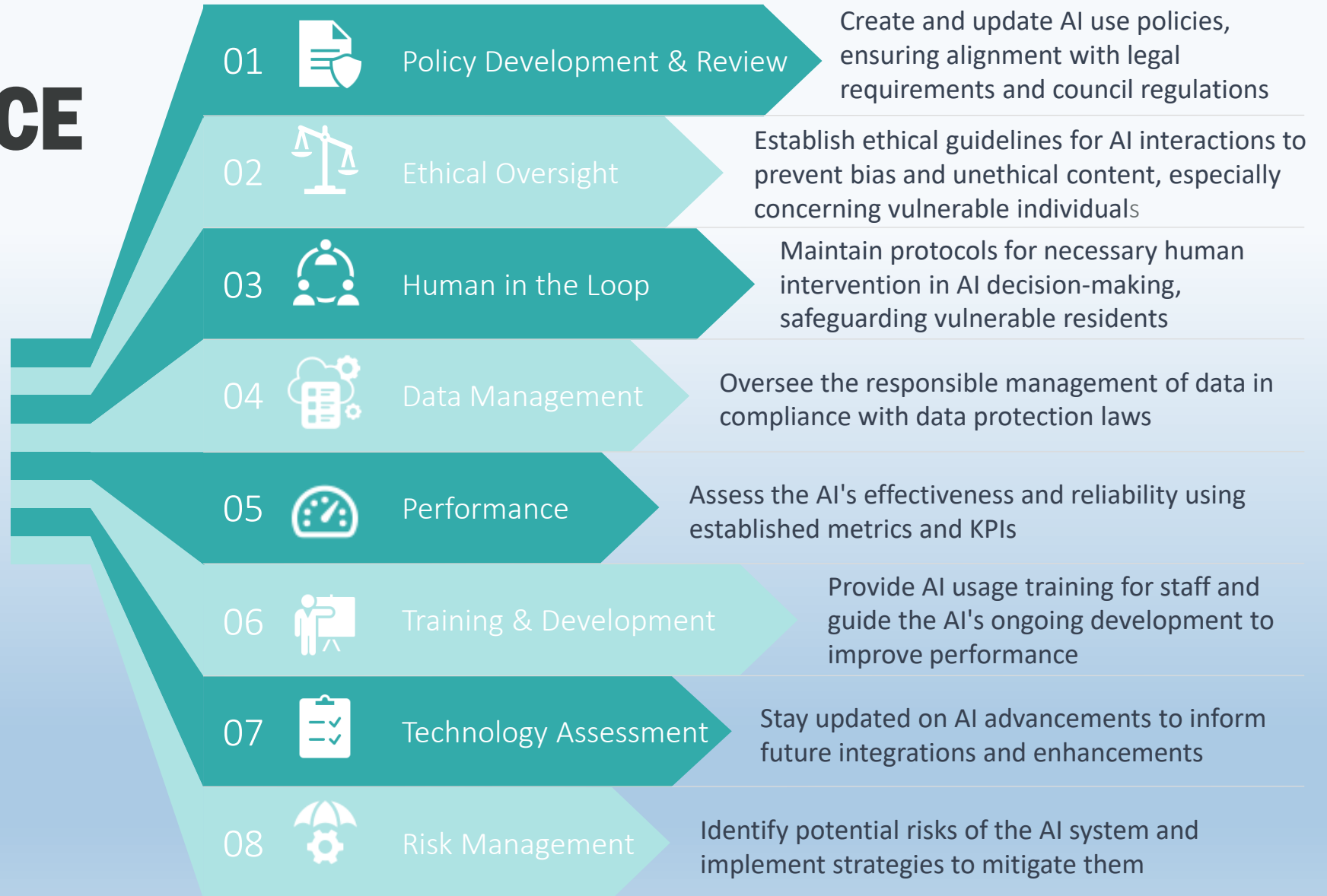
Summarisation

Simplification



EMBEDDING AI COMPLIANCE & ETHICS

Compliance Board
Monitor, Manage,
Control and Mitigate



KEY PROGRESS FACTORS

Vision, commitment and support from the Chief Exec and Council Cabinet

Chief Executive and Cabinet Mandate for corporate wide project (no opt-outs or no go areas)

Assurance of a successful, overachieving foundation technology project (Darcie and Ali)

Collaborative and Inclusive, but mandated, Art of the Possible / Business Case

An imperative; save the Council from S114 and protect services, through strategic use of generative AI

Honesty around objectives in respect of the priority being to save money while minimising service impact

Support of a key technology partner at the cutting edge and continued tracking of AI, and industry specific vision for Local Government

Resilience to low volume, high noise resistance

Assurance of creating an effective and far-reaching governance, compliance and ethics framework

Assurance over accessibility, inclusion and maintenance of channels

Focused benefit realisation project stream

Prioritising project, service, and enabling resources around the programme.

THANK YOU

Andy Brammall

Director of Digital & Physical Infrastructure and Customer Engagement
Derby City Council

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Q & A