

**REPORT TO:** Cabinet Member – Corporate Services

**DATE:** 3<sup>rd</sup> February 2010

**SUBJECT:** Corporate Customer Contact – Use of speech recognition

**WARDS  
AFFECTED:** All Wards

**REPORT OF:** Lynton Green  
Acting Finance & Information Services Director  
0151 934 4096

**CONTACT  
OFFICERS:** John Farrell  
Assistant Finance & Information Services Director  
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Janet Barry  
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**EXEMPT/  
CONFIDENTIAL:** No

**PURPOSE/SUMMARY:**

To provide more information to the Cabinet Member of the proposed use of speech recognition technology in the Sefton Plus Contact centre.

**REASON WHY DECISION REQUIRED:**

This report seeks Cabinet Member approval to implement speech recognition. The Cabinet Member for Corporate Services is portfolio holder for Corporate Customer Services.

**RECOMMENDATION(S):**

It is recommended that the Cabinet Member for Corporate Services:

- (a) Notes the contents of this report
- (b) Approves the implementation of speech recognition.

**KEY DECISION:** No

Not appropriate

**FORWARD PLAN:**

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**IMPLEMENTATION DATE:** Following the expiry of the “call-in” period for the Minutes for this meeting.

**ALTERNATIVE OPTIONS:**

The Cabinet Member may decide not to implement speech recognition, although such a decision would limit the ability to improve customer access and make efficiencies.

**IMPLICATIONS:**

**Budget/Policy Framework:** These projects will be funded by contractual obligations or commitments made by arvato.

**Financial:**

<b><u>CAPITAL EXPENDITURE</u></b>	<b>2009/ 2010 £</b>	<b>2010/ 2011 £</b>	<b>2011/ 2012 £</b>	<b>2012/ 2013 £</b>
Gross Increase in Capital Expenditure	0.00	0.00	0.00	0.00
Funded by:				
Sefton Capital Resources				
Specific Capital Resources				
<b><u>REVENUE IMPLICATIONS</u></b>				
Gross Increase in Revenue Expenditure	0.00	0.00	0.00	0.00
Funded by:				
Sefton funded Resources				
Funded from External Resources				
Does the External Funding have an expiry date? Y/N	When?			
How will the service be funded post expiry?				

**Legal:** None

**Risk Assessment:** Risk Assessment will be undertaken as part of the management of the projects.

**Asset Management:** Not applicable as this will be managed under the existing contractual obligations.

**CONSULTATION UNDERTAKEN/VIEWS**

Consultation between arvato and Sefton took place during the contractual negotiations. This will be subject to review by Council Officers through the

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Customer Contact Executive Board, Financial and Information Services Operational Board, and through the project itself.

### **CORPORATE OBJECTIVE MONITORING:**

<b><u>Corporate Objective</u></b>		<b><u>Positive Impact</u></b>	<b><u>Neutral Impact</u></b>	<b><u>Negative Impact</u></b>
1	Creating a Learning Community		✓	
2	Creating Safe Communities	✓		
3	Jobs and Prosperity	✓		
4	Improving Health and Well-Being	✓		
5	Environmental Sustainability	✓		
6	Creating Inclusive Communities	✓		
7	Improving the Quality of Council Services and Strengthening local Democracy	✓		
8	Children and Young People		✓	

### **LIST OF BACKGROUND PAPERS RELIED UPON IN THE PREPARATION OF THIS REPORT**

Tender and response documentation

Schedule 5 of the contract between arvato and Sefton Council

Reports to Cabinet Member for Corporate Services on 16<sup>th</sup> September 2009

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## **1. BACKGROUND**

- 1.1. During the contract negotiations for the Major Service Review, arvato detailed the desire to implement speech recognition as one of the commitments in The Continuous Improvement Plan for Customer Services.
- 1.2. A report was brought to Cabinet Member for Corporate Services on 16<sup>th</sup> September 2009 entitled “Corporate Customer Contact – Improving Access For Our Customers”. That report outlined the development of various projects relating to improving Customer Service, including speech recognition. Paragraph 3.2 of that report provided brief information about the proposals to implement Speech Recognition, and advised that a more detailed report would be brought to a future Cabinet Member meeting.
- 1.3. This report sets out a more detailed description of this project.

## **2. Speech recognition**

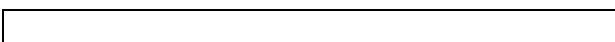
- 2.1. Speech recognition, as a technology, should not be confused with Interactive Voice Routing (IVR) which in Sefton is a simple (select 1, 2 etc) functionality to get callers to a skilled advisor quickly and effectively.

Speech recognition will be familiar to customers as it is now widely used by companies and by some Local Government Authorities and is a product that will enhance the current, very successful, use of IVR in Sefton by further reducing waiting times and allowing some services and information provision to be offered on a 24/7 basis 365 days a year. The solution enables voice interaction between the customer and the system, which responds according to what is asked.

- 2.2. The advantages for Sefton are:

- a) 24/7 services available over the telephone.
- b) Facilitates the allocation of resource to deal with the more complex and time consuming enquiries and reducing the need for live staff to complete the more routine type of call.
- c) Consistent greeting / call handling.
- d) By routing calls more effectively customers will help the Council reduce avoidable contacts (NI 14).

- 2.3 The proposed solution will give the ability to supplement, extend and if required, replace existing routine and simple functions currently delivered by live agents within the contact centre. By automating some of the more mundane functions, such as operator calls, customer surveys, waste reporting and information services, “live” agents time can be much better spent dealing with and resolving the more complex calls received in Sefton Plus. From day 1 these automated services (switchboard aside) will be available to customers on a 24/7 basis and new transactions will be rolled out on a regular basis to expand the basket of services. Where agents are available, callers can and will always be able to choose to speak to an operator, but



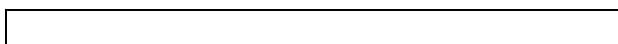
should call waiting times increase or if it is felt that automation services should be the first option for customers, then the automation agents can deal with these calls in a consistent and professional manner. The ability to break out of the automated system and speak to a person is always provided to the caller.

## 2.4. Implementation & Phase 1 “Proof of Concept”

Once approval to proceed has been received the intention would be to implement the solution across a limited number of services &/or transactions to provide a “proof of concept” analysis. The options for this first phase roll-out will come from the following:

- a) Operator / Switchboard - the solution enables callers to simply say the name of the person, department or service they require and quickly and efficiently connects them to their desired location. It is a fact that Councils and Citizens often use different terms to describe the same thing (Consider Refuse / Cleansing / Technical Services which Citizens may refer to as Bins). There are pit-falls in any switchboard operation but the planned deployment of Speech Recognition for Sefton deals with these very effectively, for example:
  - i. When a caller asks for an officer with a duplicate name, the automated operator will intelligently ask a qualification question such as "Would you like John Smith in Children’s Services or John Smith in Procurement?"
  - ii. The solution supports alternative names and synonyms, and will automatically add common variants to names. For instance, for a contact called William Jones, the automated operator will automatically add Will Jones and Bill Jones to the alternative names a caller can request without the need for administrator input.
  - iii. Personal call screening - the call is screened in the same way a human operator would, announcing the call to the called party and offering them the option of rejecting the call.
  - iv. Manager/Secretary working - when a user does not want to be interrupted, they can enable the manager secretary working option. External calls can be directed straight to the user's secretary or colleague.
  - v. There is also a built-in, optional ‘follow me’ functionality. With a simple phone call, or via a web interface, users can tell the system on which number, internal or external, they can be contacted.
- b) Customer Report – A large number of current calls are of a type where the customer is providing the Council with information on a range of issues, for example:
  - i. Household Issues (Bin was not collected / Bin has been stolen / requesting a bulky item collection).
  - ii. General Issues (Graffiti, Street Light Not working, Abandoned Car etc.).

By using Speech recognition on some of these services the aim would be to automate the collection of the relevant information and give the customer the appropriate response based on existing up to date criteria that are already established with Council Departments.



- c) Customer Information –These calls are often simple in nature, customer requirement being provision of a piece of general information or even something more specific to their particular address or circumstances;
  - i. Is it a green bin / grey bin collection week? For this the answer is based on a simple reference to the customer’s postcode.
  - ii. What items can be collected in a bulky item collection, or how to make an appeal on a Parking Ticket. Again, the answer is based on a simple reference to very specific guidelines already agreed.
- d) Customer Satisfaction Survey – the ability to carry out short customer satisfaction surveys has obvious benefits but has been something avoided to date given that it unnecessarily occupies “live” advisor resources on the end of existing transactional calls but Speech Recognition will enable this to be automated.

## 2.5. Future Phases

Other options for the future include:

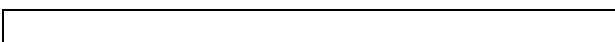
- a) Registration Calls – the ability to register for voting forms or school places
- b) Location “Find my nearest” – the ability to ask for a nearest facility, such as refuse tip or library
- c) Mail to Me - the ability to ask for specific forms, brochures or leaflets and have them delivered automatically.

Once authority to proceed has been given, one of the first tasks of the project team is to liaise with SMBC and identify which of the above calls types and specific transactions will go into Phase

## 2.6. Managing The “Risks”

The following risks, and solutions, have been identified:

- a) The caller is talking to a computer and might want to speak to a person – in practice they always have the ability to talk to a live operator if so desired.
- b) Computer Failure will result in the service not being available – a dual server solution would allow one server to be always available.
- c) The call might be directed to the wrong person – if the telephone directory is properly maintained the likelihood of this happening is small.
- d) There will be a requirement for arvato to work with SMBC to undergo a directory cleansing exercise prior to go-live with the Switchboard roll-out but this will be necessary in any case as a result of the ongoing work on the Strategic Budget review and overall re-Structure of SMBC services. This process will also provide a blueprint for future database maintenance.



## 2.7. Next Steps

- a) Sefton MBC members and Client Team agrees to the use of speech recognition technology in contact centre.
  - *Initiates project = Month 1*
- b) Lead officer(s) identified in SMBC Client team and Departments.
  - *Working Group established by middle to end of Month 2*
- c) Work begins with SMBC representatives to:
  - *“Cleanse” the corporate telephone directory for departments, services and officers. By end Month 4*
  - *Identify, the appropriate services for Phase 1. By end Month 4*
  - *Technical development and testing – Months 4 and 5*
- d) Go-Live – *Month 6*
- e) Ongoing review of Progress, Review of Phase 1 – *Monthly from Month 1*
- f) “Proof of Concept” Report back to SMBC Members. – *Month 9*

NOTE - A detailed project plan will be developed once approval to proceed has been received.

## 3. Financial Implications

- 3.1. The implementation of Speed Recognition technology is in the contractual Continuous Improvement Plan with arvato, and will not incur any additional cost to the Council.

## 4. RECOMMENDATION

It is recommended that the Cabinet Member for Corporate Services:

- (a) Notes the contents of this report.
- (b) Approves the implementation of the development and implementation of speech recognition.

