

ORGANISATION
FOR ECONOMIC
CO-OPERATION
AND DEVELOPMENT



ORGANISATION DE
COOPÉRATION ET
DE DÉVELOPPEMENT
ÉCONOMIQUES



FORUM ON TAX ADMINISTRATION

Information note

Working smarter in revenue administration— Using demand management strategies to meet service delivery goals

January 2012

TABLE OF CONTENTS

ABOUT THIS DOCUMENT	1
SUMMARY.....	2
I. INTRODUCTION.....	3
II. DELIVERING SERVICES TO TAXPAYERS—MANAGING MULTIPLE CHANNELS.....	5
Channel strategy development and management.....	5
III. EXISTING REVENUE BODY STRATEGIES AND APPROACHES FOR MANAGING TAXPAYER SERVICE DEMAND.....	9
Service delivery models.....	9
Understanding service demand.....	13
Methodologies and technologies by channel.....	14
Effecting change.....	24
Strategies to manage service demand.....	27
IV. LEARNINGS FROM THE PRIVATE SECTOR	40
V. IDEAS/PROPOSALS FOR GOING FORWARD	43
VI. KEY FINDINGS AND RECOMMENDATIONS.....	45

Boxes

Box 1. Understanding the terminology—‘topic/driver’ versus ‘root cause’	13
Box 2. What is contact/speech analytics?	18
Box 3. UK example of demand management process and governance structure	27
Box 4. ‘Reducing demand’ case studies	31
Box 5. ‘Shifting demand’ case study—Canada’s In-person Service Transition	34
Box 6. ‘Managing Demand’ case study (call in channel)—Australia’s use of IVR	37

Tables

Table 1. Service channels by country	9
Table 2. Service contact volumes by channel type and country	10
Table 3. Comparative view of demand management volumes (2010)	11
Table 4. Measurement and use of in-person demand information	14
Table 5. Measurement and use of inbound call demand information	17
Table 6. Methodologies/technologies to identify drivers and root causes	18
Table 7. Pros and cons of call demand methodologies/technologies	20
Table 8. Measurement and use of paper inquiry demand information	21
Table 9. Measurement and use of e-mail demand information	23
Table 10. Strategies for reducing demand	32
Table 11. Examples of strategies used to shift demand	34
Table 12. Initiatives to reduce avoidable or repeat call demand	36
Table 13. Examples of managing demand in-channel	37
Table 14. Strategies to address peak period demand	39

Diagrams

Diagram 1. Australian public sector guidance for developing a channel strategy..... and its linkage to managing demand	7
Diagram 2. UK public sector guidance for channel strategy development..... and its linkage to demand management	8

Annexes

Annex 1. Notes to Table 2: Number of service contacts by country	47
Annex 2. Private sector examples—managing client service demand	49

ABOUT THIS DOCUMENT

Purpose

This report summarises the findings of a study conducted by the Forum on Tax Administration's Taxpayer Services Sub-group to identify what processes revenue bodies have in place and what steps are taken to understand the root causes of service demand and how that knowledge is applied to either reduce demand or shift it to more cost-efficient channels.

Background to the Forum on Tax Administration

The Forum on Tax Administration (FTA) was created by the Committee on Fiscal Affairs (CFA) in July 2002. Since then the FTA has grown to become a unique forum on tax administration for the heads of revenue bodies and their teams from OECD and selected non-OECD countries.

In 2009, participating countries developed the *FTA vision* setting out that... *The FTA vision is to create a forum through which tax administrators can identify, discuss and influence relevant global trends and develop new ideas to enhance tax administration around the world.*

This vision is underpinned by the FTA's key aim which is to..... *improve taxpayer services and tax compliance – by helping revenue bodies increase the efficiency, effectiveness and fairness of tax administration and reduce the costs of compliance.*

To help carry out its mandate, the FTA is directly supported by a number of networks and two specialist Sub-groups—Compliance and Taxpayer Services—that each carry out a programme of work agreed by members. Both OECD and selected non-OECD countries participate in the work of the FTA and its Sub-groups.

The Taxpayer Services Sub-group exists to provide a forum for members to share experiences and knowledge of approaches to taxpayer service delivery, in particular through the use of modern technology. To achieve this objective, the Subgroup's mandate calls for it to:

- 1) Periodically monitor and report on trends in taxpayer service delivery, with a particular focus on the development of electronic/online services;
- 2) Examine ways to promote the uptake and use of electronic services by revenue bodies;
- 3) Examine options for cross-border administrative simplification and consistency; and
- 4) Assist, as appropriate, other groups of the CFA.

Caveat

National revenue bodies face a varied environment within which to administer their taxation system. Jurisdictions differ in respect of their policy and legislative environment and their administrative practices and culture. As such, a standard approach to tax administration may be neither practical nor desirable in a particular instance.

The documents forming the OECD tax guidance series need to be interpreted with this in mind. Care should always be taken when considering a country's practices to fully appreciate the complex factors that have shaped a particular approach.

Inquiries and further information

Inquiries concerning any matters raised in this information note should be directed to Richard Highfield (CTPA Tax Administration and Consumption Taxes Division) at e-mail (Richard.highfield@oecd.org)

SUMMARY

All revenue bodies are confronted with the challenge of deciding how their limited resources should be allocated optimally to meet organisational goals and objectives and to satisfy external expectations of good service and reduced compliance burden. This particularly applies in the case of revenue bodies that are currently required to respond to cost-cutting demands flowing from Government decisions to reduce the costs of public sector administration. Revenue bodies' service delivery programmes are a key consideration in this context given the significant level of resources they typically consume and the perceived potential to reduce demand and/or to use technology more effectively in service delivery.

Against this background, the Forum initiated a project in early 2011 under the title 'Working Smarter' to examine measures taken by revenue bodies to reduce costs and increase efficiency in the areas of compliance, service delivery, structuring or by using simplified legislation. This note deals with the 'service delivery' component and, as agreed, focuses specifically on revenue bodies' strategies for managing service demand.

In line with the broad objective of the 'Working Smarter' project, this study sought to identify what processes revenue bodies have in place and what steps are taken to understand the root causes of service demand and how that knowledge is applied to either reduce demand or shift it to more cost-efficient channels. Drawing on a survey of revenue bodies and related research, the study's key findings are as follows:

- Despite having implemented multi-channel service models and setting service objectives to shift taxpayers to self-service and the online channel, many revenue bodies are continuing to experience high demand on their more expensive in-person and inbound call channels.
- Most revenue bodies are measuring demand through a variety of methodologies and technologies such as manual processes, call centre and workload control systems and databases that provide useful information on volumes, trends and demand topics; however, these methodologies are typically costly, time-consuming, labour intensive and, most importantly, not effective for determining the root causes of demand.
- Generally speaking, internal revenue body governance processes for managing service demand are immature—fragmented, incomplete, and/or lacking co-ordination; and
- A number of bodies can point to successful strategies for shifting demand to more cost-efficient channels and numerous examples are identified in the note.
- Useful exploratory work, including the piloting of voice analytics technology, is being done in the private sector and by a small number of revenue bodies that offers potential future learning opportunities.

Recommendations

- Revenue bodies are encouraged to evaluate their current situation with regard to the use of their service channels to determine where demand management efforts should be focused to improve service and more effectively using revenue body resources.
- Revenue bodies are encouraged to study and consider implementing the various demand management strategies and tactics outlined in this report to reduce, shift and better manage demand in-channel.
- Revenue bodies are encouraged to consider investing in technologies & methodologies such as those currently being deployed by a few revenue bodies and the private sector to assist them in determining the root causes of their demand.
- Revenue bodies are encouraged to study the private sector findings in this report related to the governance required to effect change and reduce the causes of demand on an enterprise wide basis.

I. INTRODUCTION

Background and context

1. Government demands and expectations in the aftermath of the global financial crisis in 2008/09 have heightened awareness among public sector agencies of the need to improve the cost-effectiveness of their operations. This has been particularly relevant in a revenue administration context as revenue bodies in many OECD countries have been set challenging cost reduction targets while maintaining or, preferably, improving their standards of service delivery and the effectiveness of their compliance improvement efforts.
2. Concerning taxpayer service delivery, the FTA has undertaken considerable work in recent times to identify developments with the use of modern technology in service delivery (including the use of social media).¹ However, to date there has been little focus on the efforts of revenue bodies to improve their management of service delivery demand—to understand the drivers and causes of demand for the various services offered by them and to identify how they can be reduced and/or addressed with more cost-efficient approaches.

The role and work of the Forum

3. In September 2010 and January 2011, FTA Bureau members discussed proposals for future FTA work and the proposals ‘demand management’ and ‘managing tax administrations in a climate of constrained budgets’, were chosen for future work as a combined new priority project under the combined title ‘working smarter’.
4. The Working Smarter project is to examine measures taken by tax administrators to reduce costs or increase the effectiveness of taxpayer compliance and service activities. The project will research and identify measures on the following subjects: 1) working smarter in compliance; 2) working smarter in service delivery; 3) working smarter in structuring revenue bodies; and 4) working smarter with simplified legislation.
5. This note deals with the subject of working smarter in service delivery. For this component, it was agreed that the Forum’s Taxpayer Services Sub-group would be leveraged in light of its strong linkages to the current and previous programme of work in this domain (e.g. trends in the use of electronic services in taxpayer service delivery, the use of social media in tax administration, and administration burden reduction, etc). To assist with the work a number of countries agreed to participate in a task group² to guide the work and the Canada Revenue Agency agreed to lead the study with support from the OECD Secretariat. This note was prepared by staff from the CRA and the OECD Centre for Tax Policy and Administration.

The focus on demand management

6. The purpose of this component of the work is to collect and share knowledge on developments, strategies and solutions for ‘working smarter’ as it relates to the service delivery (demand management) component of the larger ‘working smarter’ project.
7. Demand management ranges from analysing and understanding why taxpayers are seeking the services of revenue bodies to managing the demand to ensure the most effective use of tax administration resources. Understanding the drivers and causes of demand, especially where it is growing faster than anticipated, is becoming increasingly

¹ For example, see “*Security and Authentication Issues in the Delivery of Electronic Services to Taxpayers*” (December 2011), “*Social Media and Tax Administration*” (October 2011) (at www.oecd.org/dataoecd/50/5/48870427.pdf) and “*Survey of Trends and Developments in the Use of Electronic Services for Taxpayer Service Delivery*” (March 2010) (at www.oecd.org/dataoecd/20/49/45035933.pdf).

² Australia, Canada, Chile, the Netherlands, Singapore, the United Kingdom, and the United States.

important in an effort to devise appropriate mitigation strategies to deal with future increases in demand and to encourage those requiring assistance to use other more efficient services provided by revenue bodies (e.g. self-help using the Internet). A review of processes, methodologies, and technologies utilised to understand and manage the drivers of demand, including profiling and analytics will be documented. Of particular interest is the use of channel shifting, channel convergence and the use of new technologies themselves as a strategy for managing demand.

The study and this information note

8. For the purposes of the study, a questionnaire was designed in conjunction with task group members and issued to all members of the Taxpayer Services Sub-group. Twenty five survey responses were received and these serve as the basis for the information and analysis provided in Chapter III. In addition, the study team carried out research to better understand the use of these approaches in the private sector. The key findings from this research are described in Chapter IV while Annex 2 contains a number of private sector examples. Chapter V provides a range of ideas and proposals for future work while Chapter VI sets out a summary of findings and recommendations.
9. References in the information note to particular private sector organisations or individuals should not be read as implying support, either by the OECD or surveyed revenue bodies, for the services or products offered by them.

II. DELIVERING SERVICES TO TAXPAYERS—MANAGING MULTIPLE CHANNELS

10. Developments with modern technology over the last two decades, especially as they relate to the Internet, have provided revenue bodies with an array of potentially more efficient methods—hereafter referred to as ‘channels’ in line with industry practice— to deliver services and provide information to taxpayers. With a greater array of channels available for use and a diverse range of clients to deal with, it is obviously important for revenue bodies to have a systematic and structured process to plan for making best use of available service delivery channels, taking account of all relevant considerations (e.g. organisational objectives and resource constraints).
11. At the same time, there have been many other factors that have added to the volume and complexity of revenue bodies’ workloads and their management. These include the tendency for tax legislation to become more complex, frequent changes in tax legislation, a trend by Governments to give revenue bodies additional responsibilities (e.g. welfare-related tasks) that add to client contact workloads, increasing expectations by taxpayers and their agents of high standards of service delivery performance, and increased demands by Governments on public sector agencies for improved cost-effectiveness.
12. For all of the reasons outlined, balancing the use of the different channels for optimal service delivery with cost-effectiveness considerations has become increasingly more complex for revenue bodies.

Channel strategy development and management

Service delivery channels

13. An Australian Government paper published in 2006 defines a channel as “the access mechanism used by both Government and customers to interact”.³ It goes on to give the following examples of channels:
 - **On-site** – shop-fronts, appointments
 - **On-paper**- letters, brochures, reports etc.
 - **On-call** – call centres, hotlines
 - **On-line** – website, e-mail etc.
 - **On air** – radio, TV
 - **On-the-go** – personal digital assistants (PDAs), short messaging service (SMS), video messaging.
14. Viewed in 2011, this classification can be extended to include the use of tools such as phone IVR and the social media platforms such as YouTube, Facebook, and Twitter.

Channel strategy development

15. With the growth in technology capabilities and demands for improved performance, central public sector agencies in some countries have been encouraging their respective programme agencies to intensify their efforts to make more effective use of electronic service channels. To help agencies deliver the potentially realisable benefits, practical guidance has been developed and disseminated for their attention. For example:
 - The guide ‘*Delivering Australian Government Services, Managing Multiple Channels*’, first published in April 2006 was “developed to provide agencies

³ ‘*Delivering Australian Government Services, Managing Multiple Channels*’ Australian Government, Department of Finance and Administration (April 2006).

with insight and guidance into the strategic considerations for developing a robust channel strategy. The document also provides guidance for aligning customer needs, services, outcomes and channel mix.”⁴

Drawing on the guide, Diagram 1 sets out the elements of a strategic approach for enhancing service delivery and outlines a five step process for an agency to develop a robust channel strategy, including a ‘*phase one: situation analysis*’. For the purpose of this note and its focus on demand management, Diagram 1 highlights the steps considered appropriate to conducting a ‘*situation analysis*’.

- The guide ‘*Choosing channels: Optimising the channel mix in the UK public sector*’ prepared by Deloitte for the UK public sector and published in April 2007..... “*analyses the three key dimensions of any strategy: knowing your services; knowing your customers and knowing your channels..... and provides a number of practical and pragmatic ways (for agencies) to improve their channel mix and achieve their priorities.*”⁵

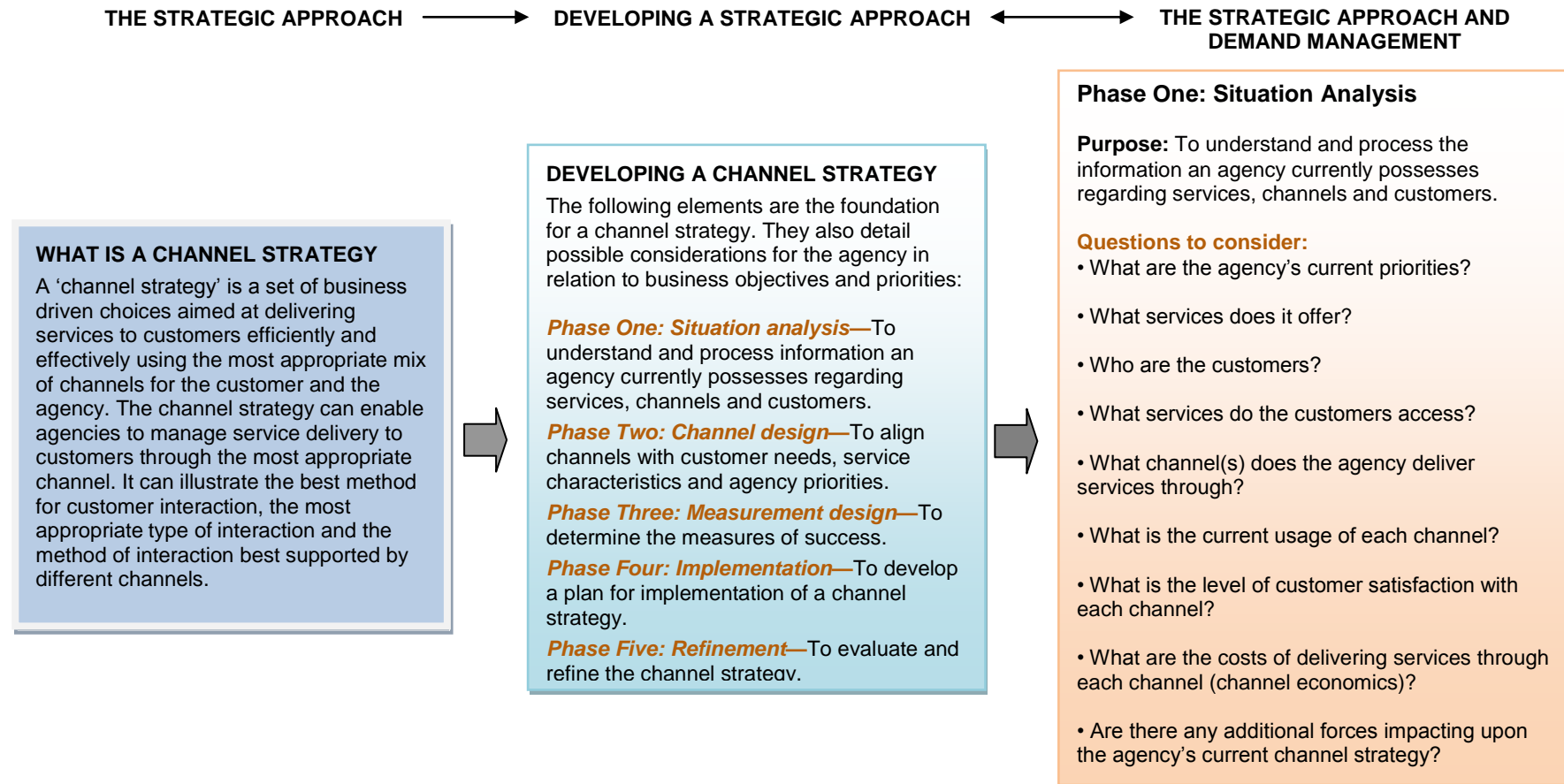
Drawing on the guide, Diagram 2 sets out the elements of a suggested strategic approach, consisting of three phases, for an agency to enhance the delivery of services to its customers. Diagram 2 highlights the steps considered appropriate for phase two—know your services, know your channels, know your customer, choose channels and then redefine your channel strategy, given their relevance to managing service demand.

16. While the two examples are presented slightly differently, both recommend a strategic approach for their respective public sector agencies to improve overall service delivery performance that generally embodies the following elements:
 - 1) Understand your current situation (i.e. the service channels used, their volumes and costs);
 - 2) Identify the factors that drive use of specific service channels and the underlying “root causes” of service demand (e.g. poor website design resulting in taxpayers using the phone channel rather than “self-serve”);
 - 3) Adjust service delivery strategies taking account of knowledge of the main root causes; and
 - 4) Monitor the impact of the revised strategies and take further action as needed.
17. This practical guidance provides brief context for the subject of this note—demand management—and its focus on the steps being taken by revenue bodies to identify the root causes of service demand and the strategies being deployed to either reduce demand or shift is resolution to more efficient/less costly service channels.

⁴ As reported at www.finance.gov.au/publications/delivering-australian-government-services-access-and-distribution-strategy/channel-management.html

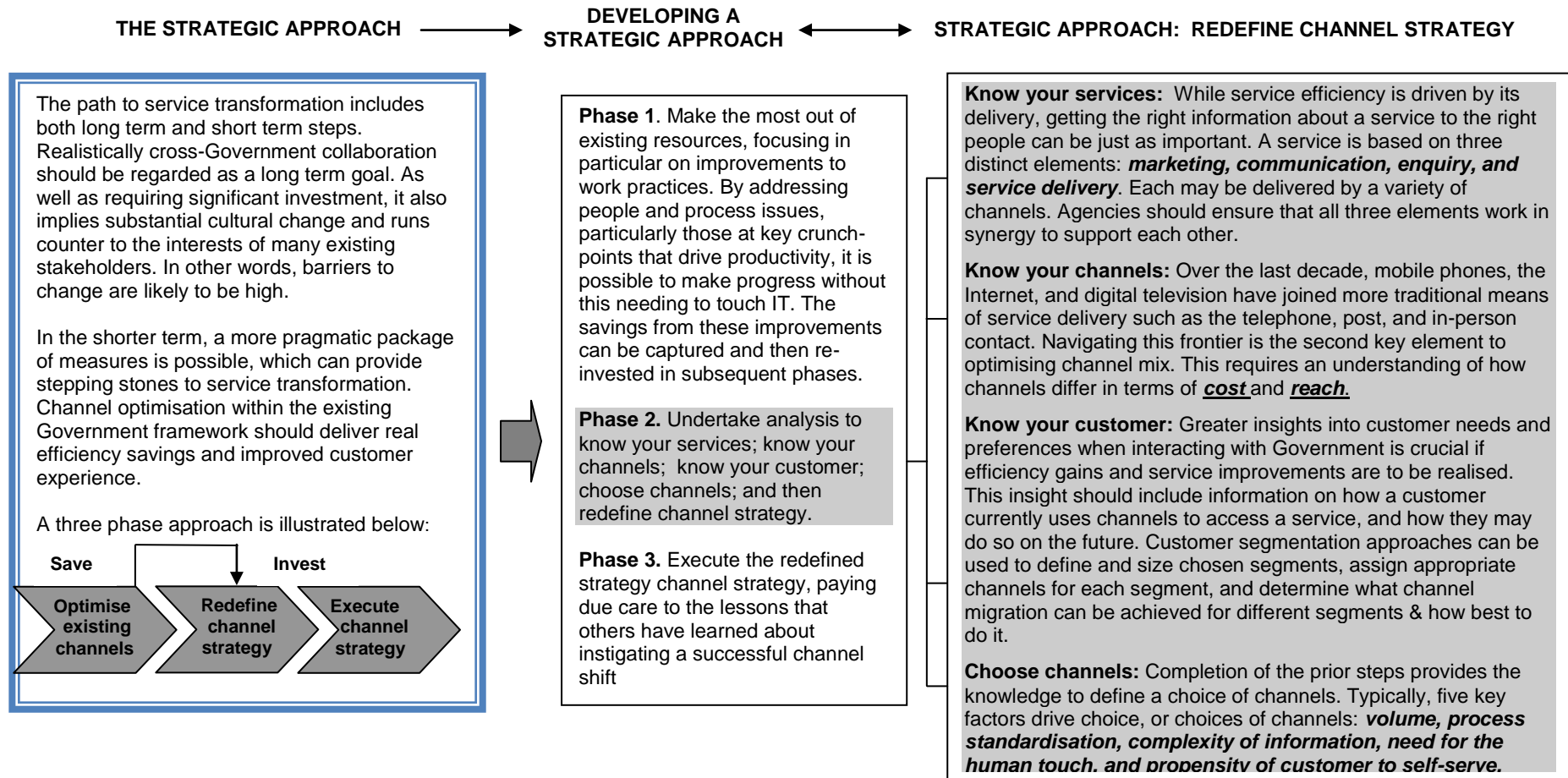
⁵ Page 1, ‘*Choosing channels: Optimising the channel mix in the UK public sector*’ (April 2007).

Diagram 1. Australian public sector guidance for developing a channel strategy..... and its linkage to managing demand



Source: 'Delivering Australian Government Services, Managing Multiple Channels', Australian Government, Department of Finance and Administration, April 2006.

Diagram 2. UK public sector guidance for channel strategy development..... and its linkage to demand management



Source: Adapted from 'Choosing channels: Optimising the channel mix in the UK public sector', Deloitte 2007.

III. EXISTING REVENUE BODY STRATEGIES AND APPROACHES FOR MANAGING TAXPAYER SERVICE DEMAND

18. This section sets out the findings of a survey of 25 revenue bodies that responded to a questionnaire designed to gather information on methodologies and technologies that they are using to determine why taxpayers initiate contact and to identify the strategies currently being deployed to manage demand. Specifically, it identifies:
- 1) The service delivery model for each of the revenue bodies;
 - 2) The methodologies and technologies used to measure and analyse demand on their service channels;
 - 3) The governance structures that exist to ensure information gained from demand analysis is used to affect change; and,
 - 4) The strategies used to manage service demand.
19. Where helpful, examples are provided from individual revenue body’s survey responses.

Service delivery models

20. Survey responses revealed that almost all revenue bodies have an established service delivery model. Most described the model as multi-channel, although not all revenue bodies use the same channels to deliver services. Table 1 shows the service channels used by country. It should be noted that the survey did not request information or contact volumes for the web as the objective for most revenue bodies is to move demand from traditional channels to online.

Table 1. Service channels by country

Country	Service delivery model exists	Service channels offered				Overall goal to move contacts to electronic channels
		In-person	Call Centre	Paper	Email	
Australia	✓	✓	✓	✓	✓	✓
Austria	✓	✓	✓		✓	✓
Belgium	✓	✓	✓		✓	✓
Canada	✓	✓	✓	✓		✓
Chile	✓	✓	✓	✓	✓	✓
Denmark	✓	✓	✓		✓	✓
Estonia	✓	✓	✓	✓	✓	✓
Finland	✓	✓	✓	✓		✓
France	✓	✓	✓		✓	✓
Hong Kong, China	✓	✓	✓	✓	✓	✓
Hungary	✓	✓	✓	✓	✓	✓
Italy	✓	✓	✓		✓	✓
Japan	✓	✓	✓	✓		✓
Mexico	✓	✓	✓	✓		✓
Netherlands	✓	✓	✓	✓		✓
New Zealand	✓	✓	✓	✓	✓	✓
Poland			✓			✓
Singapore	✓	✓	✓	✓	✓	✓
South Korea	✓	✓	✓	✓		✓
Spain	✓	✓	✓			✓
Sweden	✓	✓	✓	✓	✓	✓
Switzerland	✓	✓	✓	✓	✓	✓
Turkey	✓	✓	✓	✓		✓
UK	✓	✓	✓	✓		✓
USA	✓	✓	✓	✓	✓	✓

21. Table 2 shows the number of service contacts per country (with explanatory notes provided in Annex 1). In reviewing these volumetrics, it should be noted that the definition for contacts varies across countries. There are also variations in the programmes administered by different revenue bodies (e.g. some revenue bodies administer welfare and retirement income related programmes) with consequential impacts on service demand workloads.⁶ For these reasons, the tables (with channel volumes) do not provide a benchmark or comparisons of countries based on a common set of measures. Rather, countries are encouraged to review these volumetrics with a view to analysing why demand is continuing or appears relatively high on expensive channels and developing strategies to encourage the shift to less expensive channels. In particular, countries are encouraged to analyse the mix of channels being used most often

Table 2. Service contact volumes by channel type and country

Country	Contacts in nearest thousands across channels and years											
	In-person visits			Inbound calls			Paper correspondence			Email correspondence		
	2008	2009	2010	2008	2009	2010	2008	2009	2010	2008	2009	2010
Australia	691	731	662	10,151	12,543	10,119	3,517	3,977	3,110	27	28	19
Austria	920	920	920	3,800	3,900	3,850	-	-	-	98	110	124
Belgium	-	-	147	686	989	1,006	25	18	14	-	-	-
Canada	303	371	240	21,900	23,700	23,500	457	464	407	-	-	-
Chile	35	34	34	813	885	857	102	136	131	15	22	22
Denmark	-	-	147	3,800	3,640	3,390	-	-	-	350	345	400
Estonia	-	382	312	139	164	235	See notes	See notes	See notes	14	23	29
Finland	-	-	-	-	4,500	5,000	-	25,860	26,660	-	-	-
France	16,800	17,200	17,400	9,200	10,800	11,700	-	-	-	500	500	600
Hong Kong, China	222	226	226	1,100	1,226	1,244	459	426	427	157	163	102
Hungary	2,550	2,367	2,374	1,900	1,833	1,542	521	517	423	29	44	39
Italy	9,051	9,901	10,289	1,567	1,662	1,822	-	-	-	33	44	56
Japan	4,403	4,231	3,767	4,876	5,136	5,039	-	-	-	-	-	-
Korea	-	-	-	-	-	-	-	-	-	-	-	-
Mexico	7,730	7,431	7,423	4,530	4,749	4,773	1,179	200	110	0	0	0
Netherlands	1,000	1,000	1,000	16,300	17,400	14,800	1,000	1,000	1,000	0	0	0
N. Zealand	262	242	219	4,407	4,231	3,894	1,592	1,359	752	2,461	3,210	608
Poland	-	-	-	1,238	1,431	1,504	-	-	-	-	-	-
Singapore	239	186	143	965	999	1,022	581	450	280	215	258	220
Spain	3,091	3,165	3,033	5,500	5,800	6,700	See notes	See notes	See notes	-	-	-
Sweden	-	-	3,000	6,300	6,300	5,300	See notes	See notes	See notes	210	280	400
Switzerland	1	1	1	200	210	220	210	220	200	35	45	80
Turkey	30	32	55	176	198	254	-	-	1	-	-	-
UK	3,300	3,200	3,200	58,700	59,800	59,800	15,000	10,800	8,600	-	-	-
USA	6,900	6,200	6,400	See notes	See notes	See notes	20,000	20,000	21,000	40	47	52

22. Table 3 below provides a comparative analysis of reported channel volume against country citizen population. As with the volumes in Table 2, when reviewing these volumetrics it should be noted that the make-up of the figures or definition for contacts varies across countries and that there are variations in the programmes and manner in which they are administered by the different revenue bodies.

⁶ For example, contact volumes for Canada include those from benefit recipients of the Child Tax Credit. The behaviour and needs of these benefit recipients are considerably different from those of taxpayers, with consequential impacts on service demand requirements.

Table 3. Comparative view of demand management volumes (2010)

Country	Citizen population (mln) /1	Number of in-person visits (mln)	In-person visits / citizen population (%)	Number of inbound calls (mln)	In-bound calls/ total citizen population (%)	Inbound calls+ in-person (%)	Ratio of inbound calls/ in-person visits
Australia	22.0	0.662	3.1	10.120	46.0	49.0	15.8:1
Austria	8.4	0.920	10.9	3.850	35.3	46.2	3.2:1
Belgium	10.8	0.240	2.2	1.006	9.31	11.5	
Canada	33.7	0.240	0.7	23.500	69.7	70.4	99.0:1
Chile	16.8	0.034	0.20	0.860	5.1	5.3	
Denmark	5.5	0.147	8.0	3.390	61.6	69.6	7.7:1
Estonia	1.3	0.312	24.0	0.235	18.1	42.1	
Finland	5.3			5.000	94.3		
France	62.6	17.4	27.8	11.700	18.7	46.5	0.67:1
Hong Kong, China	n.avail.	0.226		1.245			
Hungary	10.0	2.374	23.7	1.542	15.4	39.1	0.64:1
Italy	59.8	10.289	17.2	1.822	3.0	20.2	0.30:1
Japan	127.5	3.767	2.95	5.039	3.9	6.85	1.3:1
Mexico	107.5	7.4	7.0	4.773	4.0	11.0	0.58:1
Netherlands	16.5	1.0	6.0	14.800	89.7	95.7	15:1
N. Zealand	4.3	0.219	5.1	3.894	90.6	95.7	18:1
Poland	38.1	n.avail.	-	1.504	3.9	-	-
Singapore	5.0	0.143	2.8	1.021	20.0	22.8	7.0:1
South Korea	48.8	n.avail	-	n.avail	-	-	-
Spain	45.9	3.032	6.6	6.700	14.6	21.2	2.3:2
Sweden	9.3	3.0	32.0	5.300	57.0	89.0	1.66:1
Switzerland	7.7	0.001/2	0.01	0.22 /2	2.9	2.0	
Turkey	72.0	0.055	0.08	0.254	0.4	0.1	
UK	60.9	3.2	5.0	59.8	98.2	103.2	20.0:1
USA	307.0	6.4	2.1	82.7	26.9	29.0	13.0:1

/1. Country population data as reflected in Table 45 (page 211) of *Tax Administration in OECD and Selected Non-OECD Countries: Comparative Information Series (2010)*.

/2. All data volumes relate to VAT administration only.

23. Drawing on the data provided in Tables 1, 2 and 3 there are some important observations that can be made in the context of this study:

- Despite having a multichannel environment and having made significant investments in their online channel, many revenue bodies continue to experience relatively high demand for their telephone and in-person channels. A similar observation was noted in the Forum's 2010 report '*Survey of Trends and Development in the Use of Electronic Services for Taxpayers Service Delivery*'.
- There is considerable variation across countries in the proportion of contacts for the various channels when viewed on the basis of country population. Some of these variations may be explained by variances in terms of what revenue bodies included in their volumetrics, by the mix of channels available to taxpayers and other factors (e.g. cultural) but further investigation of this situation may present opportunities for revenue bodies to improve efficiency and services to taxpayers.
- All revenue bodies reported that they use the in-bound call channel. From a comparison of demand across all channels it is evident that this channel is preferred by taxpayers.
- Almost all use in-person service; some revenue bodies indicated that they are encouraging movement away from this channel due to its high costs.
- While many offer service via paper, volumes are decreasing.
- Demand on the e-mail channel is increasing; many reported treating this channel the same as paper and making efforts to reduce or discourage its use.

Strategy to move taxpayers to the electronic channel

24. Although it is apparent from the volumetrics in Table 2 that the traditional channels continue to be the preferred channels, 22 of the 25 revenue bodies confirmed that their service objective is to migrate taxpayers to 'self-serve' and preferably the online channel. A sample of the responses received is set out below:

- *Australia*: The ATO has a Service Delivery Framework that provides the strategic direction to move clients to electronic channels.
- *Belgium*: For each e-service (e.g. electronic returns for personal income tax, VAT, etc.) quantified goals are set and data are pre-filled as far as possible.
- *Canada*: The Canada Revenue Agency's Service Strategy articulates the long-term goal that the majority of taxpayers conduct their tax and benefit affairs with the agency on a self-service basis.
- *Chile*: The SII has incorporated and developed the use of Internet as its preferred channel for addressing taxpayer service requests. The use of the electronic channel has helped taxpayers to significantly reduce mistakes and problems in their tax returns.
- *Denmark*: As far as possible contact via e-mail, letter, in-person and walk-in enquiry centres are to be replaced by telephone contact, or preferably by better electronic services.
- *Estonia*: The revenue body (ECTB) has set an objective for 2009-2012 to reduce the administrative burden of law-abiding citizens through the diversification of the services provided and improvement of the process quality. It means that it will further develop its e-environment, and provide new e-services and simplified processes.
- *France*: French tax authorities undertake strong advertising campaigns to encourage taxpayers to use the internet channel for filing their tax returns or paying their taxes. Advertising campaigns take various forms: radio commercial, press articles, TV news reports, flyers distributed in public places, and web banners. A national press conference is held every year by the Finance Minister and followed by local press conferences in every department (i.e. region).
- *Mexico*: Through two strategic goals (Simplification of procedures and services and Tax Culture Program), the revenue body seeks to facilitate the education process and promote the use of electronic tools and services to reduce the inflow to the centres of personal attention.
- *Spain*: One of the revenue body's strategic initiatives is enhancing the relationship with taxpayers through ICT. One of the main tasks is the enlargement and adaptation of electronic services provided to citizens and companies. The activities involve promotion and diffusion of the electronic mechanisms of electronic communication.
- *Singapore*: IRAS's strategy is to provide an easily accessible, simple and convenient suite of e-services where taxpayers can self-serve at any time and place at their own convenience. IRAS also provides useful and comprehensive information presented in a taxpayer-centric manner on its website that allows taxpayers to self-serve for their simple enquiries.
- *Sweden*: Moving contacts from manual service to self-service in electronic channels is an important part in our strategy. We try to make the services offered in the electronic channels more attractive and built from a user perspective.

Understanding service demand

25. Demand management ranges from analysing and understanding why taxpayers are seeking the services of revenue bodies, to managing the demand to ensure the most effective use of tax administration resources and channels.
26. Understanding the topics/drivers and root causes of demand, especially where it is growing faster than anticipated, is becoming increasingly important in an effort to devise appropriate mitigation strategies to deal with future increases in demand and to encourage those requiring assistance to use other more efficient services/channels. Box 1 illustrates the difference between the topic/driver of a contact and the root cause.

Box 1. Understanding the terminology—‘topic/driver’ versus ‘root cause’

A taxpayer may initiate a call to a revenue body’s call centre to obtain a business number. From a topic/driver perspective, this call would be classified as a request for a business number or business registration. However, to determine the ‘root cause’ the issue to be resolved is to understand precisely why the taxpayer decided to call and speak with an agent to obtain a business number when he/she could have used the online business registration system or sent in a request by mail instead. More specifically, it needs to be determined why these other methods may not have been considered by the taxpayer. For example, was it because:

- 1) Of a lack of awareness of the other methods available? In which case the mitigation strategy may be around better marketing?
- 2) The online system was difficult to use? This may lead us to suggesting changes to the online system.
- 3) The documentation in the paper registration kit was difficult to understand or left questions unanswered? That would require a rewrite of the information.
- 4) The taxpayer required a business number on an urgent basis and decided that the quickest way of obtaining it would be to call and speak to an agent? That could suggest a realignment of service standards to make the online issuance of a business number the fastest service.
- 5) The taxpayer was advised by some external organisation to call for the number? This could mean ensuring that the external organisation has the right information.

Once the underlying reason or cause for the contact has been determined, the revenue body will be in a much better position to affect positive change. Understanding demand needs to go beyond establishing topics or drivers of contacts. It is only by determining the true root cause of contacts that you will be able to influence those contacts in the future.

Measuring Demand

27. The survey found that the majority of revenue bodies actively measure demand on their service delivery channels. Specifically, the survey responses revealed that:
 - 23 of 25 revenue bodies measure demand on some of their service delivery channels with the inbound call channel being measured most at 23 of 25, followed by the in-person channel at 21 of 25. This is likely due to the fact that these are the channels receiving the bulk of the contacts; and
 - Of the 18 revenue bodies that offer service via paper and e-mail, most measure the demand to these two channels.
28. The aim of this study was not to measure and identify the particular topics/drivers that each revenue body experiences, but rather to identify the methodologies and technologies that are used to measure demand and whether these are also being used to identify the topics/drivers and root causes behind the demand. The following sections summarize the results for each channel.

Methodologies and technologies by channel

In-person channel

29. The in-person channel continues to be one of the primary service delivery channels. As shown in Table 4 below, 21 of 25 surveyed revenue bodies reported that they measure demand on this channel and 13 reported that they use the information to identify drivers and root causes; five revenue bodies are piloting or partially use or make limited use of the information.

Table 4. Measurement and use of in-person demand information

Country	Demand for in-person visits is measured	Volume of in-person inquiries			The information is used to identify drivers and root causes
		2008	2009	2010	
Australia	✓	690,832	730,796	662,078	✓ (limited)
Austria	x	920,000	920,000	920,000	x
Belgium	✓	n.avail.	n.avail.	146,508	✓
Canada	✓	303,000	371,000	240,000	x
Chile	✓	34,582	34,421	33,768	✓
Denmark	✓	480,000	440,000	400,000	✓
Estonia	✓	n.avail	382,040	312,453	✓
Finland	✓	Note /1	Note /1	Note /1	✓ (occasionally)
France	✓	16,800,000	17,200,000	17,400,000	✓
Hong Kong, China	✓	222,425	226,476	225,720	✓
Hungary	✓	2,550,266	2,366,875	2,374,177	✓
Italy	✓	9,051,324	9,900,891	10,289,304	✓
Japan	✓	4,403,000	4,231,000	3,767,000	x
Korea	✓	n.avail	n.avail	n.avail	✓ (partially)
Mexico	✓	7,730,920	7,431,120	7,422,676	✓
Netherlands	x	1,000,000	1,000,000	1,000,000	✓ (partially)
New Zealand	x	261,782	242,299	219,326	x
Poland	x	n.avail	n.avail	n.avail	-
Singapore	✓	239,460	186,071	142,645	✓
Spain	✓	3,091,613	3,164,625	3,032,625	✓
Sweden	✓	n.avail.	n.avail.	3,000,000	✓
Switzerland	x	740 /2	700 /2	660 /2	x
Turkey	✓	30,000	31,600	55,100	✓
UK	✓ (piloting)	3,300,000	3,200,000	3,200,000	✓ (piloting)
USA	✓	6,900,000	6,200,000	6,400,000	✓

/1. *Finland*: In-person not measured systematically, data collected when needed from the largest tax offices. The behaviour of customers varies greatly depending on the area.

/2. All data volumes relate to VAT administration only.

Methodologies and technologies for measuring demand

30. Of the 21 revenue bodies that measure demand in this channel some are using queue management systems (QMS) while others are manually tracking the number of taxpayers using this channel. For those tracking demand manually, the volumes are then typically entered into a database that can be accessed to provide statistical analysis on volumes, trends and the topics or drivers of demand. A few are using employee focus groups and analysis from their Customer Relationship Management (CRM) systems. Some revenue bodies only measure demand on this channel during filing or peak periods. Examples of survey responses are set out below:

- *Australia*: The methodology used to measure the volume of in-person demand is obtained through manually input data from staff in the Shopfronts. The process involves selecting the main topic the client sought assistance with and whether the interaction involved an interview.
- *Canada*: The Canada Revenue Agency (CRA) uses three methodologies to measure demand for the in-person channel: 1) counter agents record the number of walk-ins and how they are served (by appointment, telephones to call centres etc.); 2) appointment agents record the topic(s) discussed and duration of the appointment; and 3) periodically counter agents survey clients to determine why they continue to choose the in-person service.
- *Denmark*: Manual ticking of boxes in an online form for a selected number of days per month for each customer being serviced at the counter in the tax offices.
- *Finland*: Occasionally, data of the root cause are gathered manually under a specific theme. Manual reports on statistics (volumes mainly) and reasons for contacting e.g. when new services are launched or changes in taxation occurred. Also in use is a queue management system to tell about the demand factor.
- *France*: The measures are realised using a QMS which allows the revenue body to count the number of taxpayers received and to capture the main reason of their visits (the tool is customised to register the main causes for taxpayers visits).
- *New Zealand*: IRD's in-person service is split into two parts, reception and counter. Reception deals with any query able to be managed by a receptionist—generally high volume/low value in nature. Counter handle the more complex enquiry, and are managed on an appointments only basis. To date, the methodology for measuring demand has been by manual reporting and recording of volumes and time in two separate places.
- *Spain*: In its local offices, the revenue body uses ticket expenditure machines that require taxpayers to select the topic of the service(s) required; this enables it to identify the root causes of demand and put in place short term resourcing.

Ability to determine the driver and root cause

31. Generally revenue bodies indicated they use the information gathered to schedule the appropriate number of staff and skills needed to meet demand and address taxpayer needs. There was no indication that changes were made to business processes to actually reduce demand or address the root cause that initiated the taxpayer concerns, thereby mitigating the need for them to contact the revenue body. In other words, the information has been used to develop demand management strategies to better manage the channel and increase the quality of service provided but has not allowed the organisation to maximize efficiency gains by eliminating the demand or shifting it to self-service.
32. Set out below are country responses regarding their ability to determine the driver and root causes of service demand:
 - *Australia*: The ATO can track the volume of client interaction in its Shopfronts, the type of interactions (interview/non-interview) and the topics clients visit to discuss. However, the data cannot be used to identify specific client groupings and the reasons for their engagement with the ATO via the Shopfronts.
 - *Canada*: The methodologies gather useful information but do not support analysis as to the causes of demand. The value of gathering this information is that it provides data for demand forecasting and staff scheduling. The information regarding topics commonly driving the in-person channel is also used to ensure staff training and reference material reflect taxpayers' needs and expectations and that information on the topic is available on the web.
 - *Chile*: For all channels we use Database analysis using Data Warehouse. The analysis of the data provided by the Data Warehouse allows the SII to identify the

root cause behind the demand, but they do not tell us how to handle it. This we can only obtain from contact information analysed.

- *Hong Kong*: An electronic queuing system records the number of callers. At the same time, the counter staff record the nature of enquiries raised by each call by inputting work-codes.
- *Mexico*: The systems deliver metrics on the demand for point of contact, type of service, time, frequency, timing, and seasonality. Qualitative information and perceptions from exit polls also help to identify the causes of demand.
- *New Zealand*: Currently in-person contacts are recorded in our tax accounting database (OLACS) combined with data mining. This technology could be used to identify some further information about drivers/root causes for the counter contacts, but not reception contacts as IRD numbers and other data is not captured at reception. Significant manpower and data-mining would be required to determine drivers and root causes.
- *Singapore*: The QMS is only able to track the broad categories of walk-ins; while the QMS is unable to identify the driver and root causes of demand it offers a good starting point for more in-depth analysis of demand drivers. The reports generated from the customer relationship management module show the exact number of contacts for each category of taxpayer and the nature of the contact; however, this all requires staff resources for accurate and comprehensive data to be captured.
- *Sweden*: The Swedish Tax Agency uses in-depth interviews of taxpayers as well as focus groups. Interviews are carried out by private sector consultants, not revenue body staff.
- *United States*: Q-Matic tracks the number of customers, how long it took to be serviced and the service type of their visit. Trends in the service type demand can be identified however not the driver or the root cause.

Benefits and Challenges

33. There are a number of benefits to using Queue Management Systems to measure demand to the in-person channel. Respondents indicated that these systems provide an automated way of tracking the number of visits, are typically easy to use, and provide a wide variety of reports for analysis purposes. They also provide a breakdown of contacts by tax type or topic but the accuracy of the breakdown is dependent on taxpayers selecting the correct tax type or topic. However, only those using agent interview or CRM systems indicated that are able to identify root causes.
34. When it comes to challenges, revenue bodies indicated that measuring visits and recording the driver or root cause of the visits manually is labour intensive and can lead to imprecise data as is analysing data from agent visits or CRM systems.

Summary

35. As indicated above, the methodologies and technologies generally used in this channel do provide extremely useful information regarding demand topics, volumes, and trends that are needed to better manage demand in channel. However, few provide the granularity required to determine the root cause of the contact.

In-bound calls channel

36. The inbound call channel continues to be the most popular service delivery option with taxpayers. All revenue bodies reported that they use the in-bound call channel and 24 out of 25 revenue bodies measure or partially measure the demand for in-bound calls. When it comes to using the information to determine drivers, 16 revenue bodies reported that they do use this information to determine drivers with an additional six reporting that

they do so on a limited, occasional or partial basis. Table 5 below is a summary of the data reported by revenue bodies.

Table 5. Measurement and use of inbound call demand information

Country	Demand for in-bound calls is measured	In-bound phone call volumes			The information is used to determine drivers and root causes
		2008	2009	2010	
Australia	✓	10,151,169	12,543,526	10,119,409	✓ (limited)
Austria	✓	3,800,000	3,900,000	3,850,000	✓
Belgium	✓	686,383	988,974	1,006,225	✓
Canada	✓	21,900,000	23,700,000	23,500,000	✓ (partially)
Chile	✓	813,036	884,566	857,420	✓
Denmark	✓	3,800,000	3,640,000	3,390,000	✓
Estonia	✓	138,754	164,013	235,461	✓
Finland	✓		4,500,000	5,000,000	✓(occasionally)
France	✓	9,200,000	10,800,000	11,700,000	x
Hong Kong, China	✓	1,099,385	1,226,166	1,244,498	✓
Hungary	✓	1,899,954	1,833,180	1,542,085	✓
Italy	✓	1,567,285	1,662,488	1,822,343	✓
Japan	✓	4,876,000	5,136,000	5,039,000	x
Korea	x	n.avail	n.avail	n.avail.	✓ (partially)
Mexico	✓	4,529,577	4,749,079	4,772,851	✓
Netherlands	✓	16,300,000	17,400,000	14,800,000	✓ (partially)
New Zealand	✓	4,406,845	4,230,914	3,894,454	✓ (partially)
Poland	✓	1,237,943	1,431,301	1,504,074	✓
Singapore	✓	965,075	999,040	1,021,543	✓
Spain	✓	5,500,000	5,800,000	6,700,000	✓
Sweden	✓	6,300,000	6,300,000	5,300,000	✓
Switzerland	✓ (partially)	200,000 /2	210,000 /2	220,000 /2	x
Turkey	✓	175,582	198,427	254,132	✓
UK	✓	58,700,000	59,800,000	59,800,000	✓
USA /1	✓	317,000,000	216,000,000	222,700,000	✓

Note: /1. USA: This may include calls that are in response to information requests since we cannot differentiate.

/2. All data volumes relate to VAT administration only.

Methodologies and technologies for measuring demand

37. Most revenue bodies measure demand in terms of volumes and timing of contact on the inbound calls channel primarily through call management systems that operate in real-time. A few countries also use telephone metrics reports provided by the telephony companies providing service. Listed below are some examples.

- *Australia*: Call demand is measured by queue. Each queue maps to a particular option or set of options in the IVR attached to the various ATO Inbound Numbers. Accordingly, demand can only be measured in terms of the IVR selection options available to the client. In the ATO, these are set up by Product Group (Income Tax, Business Tax, Superannuation, and Payment Compliance) and also by Client Group (General Public, Practitioner).
- *Canada*: The toll-free information system determines the actual number of calls and unique callers that attempt to access the telephone channel. Since each different service has its own unique toll-free number at a high level we are able to determine which business line they are calling but not the root cause of the call.

- *Hong Kong*: A computerised system – Call Management System, is used to measure the demand. It measures the real-time incoming calls, such as the number of successful incoming calls, the longest waiting time etc.
- *Korea*: The Call Management System automatically tracks demand. However, root cause analysis is only performed partially by the staff when relatively large numbers of taxpayers make the same type of inquiries.
- *Singapore*: Call Management System (CMS) – This system allows IRAS to measure the number of calls for any specified period. The system tracks demand at the helpline based on the tax type of the enquiry selected by the taxpayer at the Integrated Voice Response (IVR) system. Reports can be generated from CMS to show the total number of calls for a specified period, the breakdown for each tax type, the average waiting time, the resources used for the helpline for that period.

Ability to determine the driver and root causes of service demand

38. The survey asked whether the information gathered to measure demand can be used to identify the driver or root causes of the demand. Many of the revenue bodies that measure demand reported they also gather information to determine the drivers and/or root causes of demand. Table 6 below provides the specific methodologies and technologies currently being used for this purpose.

Table 6. Methodologies/technologies to identify drivers and root causes

Methodologies and technologies	Countries using these methodologies and technologies
Feedback through interviews with call centre agents	<i>Belgium, Canada, Estonia, Finland, Korea, Poland, Singapore, Switzerland</i>
Coding by call centre agents on the call topic or tax type (also referred to as Fast Key Codes or Work Codes)	<i>Australia, Canada, Hong Kong, New Zealand, United Kingdom</i>
Interactive Voice Response (IVR) Systems	<i>Australia, Canada, New Zealand, Singapore, United States</i>
Call listening/Quality assurance data	<i>Australia</i>
Caller surveys	<i>Australia, Canada, Finland, Hungary, United Kingdom</i>
Databases information on the services provided to taxpayers	<i>Chile, Italy, Mexico, Spain, United States</i>
Contact/Speech analytics	<i>Australia, New Zealand, United States</i>
Customer Relationship Management (CRM) Systems	<i>Belgium, Singapore</i>

39. As identified above, two countries are using a tool called contact/speech analytics with an additional country (New Zealand) planning a short pilot to evaluate its potential benefits. Box 2 provides a description of contact/speech analytics.

Box 2. What is contact/speech analytics?

Speech Analytics technologies are automated tools that mine, categorize, and analyse unstructured audio from dialogue. While the various products available differ in their methods of breaking down and analysing human speech, all provide near real-time feedback designed to extract useful information from customer interactions.

These products can provide a better understanding of customer behaviour and analyse call content automatically to provide insight into why customers call. They can be used to isolate words and phrases used most frequently and indicate whether usage is trending up or down. You can even zero in on the emotion of calls by searching for certain keywords or phrases.

Simply put, the purpose of speech analytics is to: 1) record the information; 2) structure the information into searchable data; 3) analyse the data; and 4) take action on the findings of the data analysis.

40. Additional details on the methodologies and technologies used by surveyed revenue bodies to determine drivers and root causes of service demand are set out below:
- *Australia*: The ATO is currently implementing the Verint capability, a complete suite of products that allows the integration of quality assessment data, speech and data analytics, and customer satisfaction survey results. Queue history in Verint will provide an indication on demand. Speech and Data Analytics capabilities will allow for drivers, root causes and correlation between issues to be identified. For example in Speech Analytics, phrases can be established to mine data for why the customer is calling, and compare this to queue history on our Interactive Voice Recognition systems.
 - *Belgium*: Interactions (received, abandoned, answered, AHT, etc.) and questions (type of questions and more detailed content of the questions) are measured primarily through analysis on question level (CRM). However, this quantitative approach has to be combined with a qualitative approach (i.e. formal and informal discussions with agents and team leaders). Staff effort is not measured.
 - *Canada*: Line of Business Coding – Using a web interface Call Centre Agents code the types of enquiries received. This information is summarised and available in near real time. Not all calls are coded but rather a daily sample is taken. This provides volumetrics on the number of calls based on pre-established categories. Although this system does not provide the CRA with the root causes of calls it does provide the number of enquiries by category. This system provides an indication of what taxpayers are calling about but not why they are calling.
 - *Mexico*: The incoming calls through an IVR (Interactive Voice Response) – The IVR can be used to identify the factors and the main reasons behind the demand throughout nine options, which only requires extracting automatic information.
 - *Singapore*: Siebel is IRAS’s customer relationship management system, which allows it to track the mode, exact date and time and nature of contact that each taxpayer has with us. Officers will enter the details into the system after each contact with taxpayers. Reports can be generated for specified periods to show the total number for each category and specific nature of contact (e.g. assessment related enquiry > checking on status of assessment).
 - *United Kingdom*: Call Classification and Voice of the Customer (VoC) Postcards – Classification of calls handled is undertaken by a group of advisors (per line of business) who classify every call they take into categories that reflect the reason for their call in the words (“voice”) of the customer. This information is used to produce a ‘Skyline’ report that includes reports on trends, call value, cost to serve and percentage breakdowns. The VoC Postcard provides further qualitative views on the calls and their root causes directly from advisors.
 - *United States*: Contact Analytics (CA) is a tool that evaluates recorded audio from contact centre recordings to identify contact centre improvement opportunities. It converts the contact centre recordings into a searchable text file that allows large segments of recorded calls to be selected as a group and reviewed based on user-specified words and phrases to help the user to isolate and analyse an issue. It provides users with the ability to drill down to individual recordings to hear selected conversations. Although it does not measure demand, it allows for identification of the root cause and drivers of demand. Contact Analytics provides for keyword searches on specific topics. Beneficial for ‘hot topic’ issue estimates. The data can be used for estimating but is not considered a valid sample for forecasting demand. Extraction and analysis of the data are time-consuming and costly.

Benefits and challenges

41. Table 7 below identifies the methodologies/technologies used by revenue bodies and some of the benefits and challenges reported.

Table 7. Pros and cons of call demand methodologies/technologies

Methodology/ technology	Pros	Cons
Agent feedback	<ul style="list-style-type: none"> ✓ Provides demand by tax type or topic ✓ Inexpensive 	<ul style="list-style-type: none"> ✗ Not quantifiable ✗ Not timely ✗ Does not identify root cause.
Line of business coding	<ul style="list-style-type: none"> ✓ Provides demand by tax type or topic 	<ul style="list-style-type: none"> ✗ Range of enquiries can be quite diverse requiring much coding ✗ Requires agents to record ✗ Does not identify root cause
IVR	<ul style="list-style-type: none"> ✓ Menu options provide demand by tax type/topic 	<ul style="list-style-type: none"> ✗ Not easy to drill down below the menu level to get to root causes
Call listening/ Quality assurance	<ul style="list-style-type: none"> ✓ Root cause can be determined. 	<ul style="list-style-type: none"> ✗ Lacks real-time element and is labour intensive
Caller surveys	<ul style="list-style-type: none"> ✓ Provides a good indication of what taxpayers are calling about 	
Databases	<ul style="list-style-type: none"> ✓ Can provide root causes 	<ul style="list-style-type: none"> ✗ Data capture is labour intensive ✗ Specialists required
Contact/Speech analytics	<ul style="list-style-type: none"> ✓ Provide root causes by mining, categorising and analysing audio from conversations 	<ul style="list-style-type: none"> ✗ Extraction and analysis of data is time consuming and costly
CRM	<ul style="list-style-type: none"> ✓ Can provide root causes 	<ul style="list-style-type: none"> ✗ Labour intensive ✗ Manual effort to key contacts details

42. Many of the methodologies and technologies identified by respondents do provide useful information on call demand but at a very high level. Line of Business coding and IVR systems provide the topics and timing of taxpayer contacts and at a relatively low cost. However, they lack the ability to provide the detail required to identify the root cause of the contact. A similar outcome was identified for the in-person channel.
43. The use of caller and frontline agent surveys, databases and CRM systems do provide the type of information that facilitates analysis to determine the root cause of contacts, but these can sometimes be labour-intensive and lack a real-time element, although this is not the reported experience of HMRC in the United Kingdom. It has expanded its agent surveys to classify contacts and initiate the development of action plans to address the cause of the contact and/or develop self-help service options.
44. Only three of the revenue bodies described the use of voice analytic technology; both are at the early stages of implementation and have yet to gain the necessary experience to determine whether this will be an effective tool for determining root causes of demand.

Summary

45. As with the in-person channel, many of the respondents are able to identify drivers/ topics of demand with the methodologies and technologies they have in place. Some can also determine the root cause, but many indicate that it is a labour intensive process for them to do so. Only one of the respondents (*United States*) indicated that they have implemented contact or speech analytics technology and one other (*Australia*) is in the process of implementing this new technology to assist in determining drivers and the root cause of demand. *New Zealand* is planning an opportunity analysis pilot to determine the potential costs and benefits of using this technology.

Paper channel

46. As noted earlier, the contact statistics reported by revenue bodies shows a downward trend in demand in the paper channel—refer Table 8. Some revenue bodies indicated that they do not measure demand on the paper channel given its low volume. Only 16 revenue bodies measure demand and ten revenue bodies identified that they use the information

to identify drivers. An additional three revenue bodies indicated that they use the information occasionally.

Table 8. Measurement and use of paper inquiry demand information

Country	Demand for inquiries is measured	Paper inquiries volumes			The information is used to identify drivers & root causes
		2008	2009	2010	
Australia	✓	3,517,466	3,976,974	3,707,748	✓
Austria	x				x
Belgium	✓	25,295	18,090	13,954	✓
Canada	✓	457,000	464,000	407,000	x
Chile	✓	101,711	135,752	131,226	✓
Denmark	x	-	-	-	x
Estonia	x	-	-	-	✓
Finland	✓	-	25,860,000	26,660,000	✓ (occasionally)
France	x	-	-	-	x
Hong Kong, China	✓	458,778	426,330	426,614	✓
Hungary	x	520,861	516,984	422,744	x
Italy	x				x
Japan	✓	118	146	150	x
Korea	✓				✓ (partially)
México	✓	1,178,627	199,606	109,972	✓
Netherlands	x	1,000,000	1,000,000	1,000,000	x
New Zealand	✓	1,592,371	1,358,899	752,171	x
Poland					
Singapore	✓	581,274	449,856	279,866	✓
Spain		See Notes	See Notes	See Notes	
Sweden	✓	See Notes	See Notes	See Notes	✓
Switzerland	✓	210,000 /1	220,000 /1	200,000 /1	x
Turkey	✓			921	✓
UK	✓ (trailing)	15,000,000	10,800,000	8,600,000	✓ (trailing)
USA	✓	20,000,000	20,000,000	21,000,000	Yes

Notes: See Annex 1.

/1. All data volumes relate to VAT administration only.

Methodologies and technologies for measuring demand

47. Of the revenue bodies that do measure demand on this channel most are using automation to track and manage correspondence. Examples from survey responses:

- *Australia*: Correspondence is scanned and then distributed by the Siebel system which is used to measure its volumes by the types established.⁷
- *Canada*: For paper contacts, Tax Services offices record all correspondence received by topic or predetermined category (e.g. registration, waivers etc.). CRA uses a national web based correspondence workload system that captures the category of all correspondence received.
- *Singapore*: Inland Revenue Interactive Network (IRIN) – IRIN is IRAS’s computerised tax administration system that supports our daily operations. This system allows us to measure and report the number of correspondences received for any specified period. Reports can be generated from IRIN to show the total number of correspondences and the categories of correspondence received.

⁷ Siebel is a commercial-off-the-shelf software product for industry standard functions such as workflow, case management and customer relationship management

- *United States:* Paper demand is tracked manually through a number of reports generated by legacy systems and various functions that monitor paper activity.

Ability to determine the driver and root cause

48. Similar to the in-bound and in-person channels the survey responses reveal that of those that measure demand in the paper channel most record the type of enquiry or topic but not the underlying reason for the contact. There are some exceptions for those revenue bodies that are using case management systems and classification structures. These systems facilitate data mining activities that can result in the identification of potential causes. The following provide some examples.

- *Australia:* Requests for advice and guidance are classified within our case management system according to the revenue product (e.g. Goods and Services Tax, Income Tax), Market segment (Individuals, Micro, Small and Medium Enterprises, Large Businesses, Not for Profit, and government organisation) and the nature of the topic the advice and guidance is being requested for. This classification system allows for later analysis of changes in demand. Having a high level classification system enables us to identify growth areas and then to use this as a trigger to initiate further action to uncover the reasons behind this and any mitigating strategies that may be required. The classification system has a pre-defined set of values allowing for work to be classified according to enterprise determined appropriate values to facilitate meaningful data mining activities.
- *Chile:* The revenue body uses database analysis tools via its data warehouse capability that allow it to identify the root causes behind the demand. However, further analysis of contact information is required to identify remedial strategies.
- *New Zealand:* The technology currently used captures completed outputs and enables IRD to readily identify the volumes received (by tax types or broad subjects), but not information on the root causes of contact.

Benefits and challenges

49. Revenue bodies using classification systems indicate this methodology facilitates mining of the data in order to do trend analysis.
50. The use of data mining software, data warehousing and spreadsheets enables the sorting of vast volumes of data and the use of search criteria to pinpoint trends. However, the technology can be costly and requires the availability of both technology specialists and knowledge workers. Revenue bodies using scanning to transfer the paper contacts into their systems indicated that this technology is both time consuming and costly.
51. The biggest challenge in using a classification system is ensuring that you have the correct pre-defined set of categories to classify the contacts.

Summary

52. Overall, most revenue bodies that are measuring their paper channel reported that the methodologies and technologies used to measure demand allow them to determine volumes, trends on specific tax types and broad topics but not the root cause of contacts.

E-mail channel

53. Survey responses indicate that 16 of 25 revenue bodies provide access to service through e-mail. In most cases the volume of contacts for e-mail are significantly lower in comparison with the other channels offered. A number of the revenue bodies indicated that they provide very structured e-mail contacts through the use of web forms. Of those that offer e-mail as a channel, 11 indicated that they measure the demand for e-mail and one revenue body indicated that they partially measure demand. When it comes to using the information to identify drivers and root causes only eight revenue bodies responded that they do with one saying that they do so in a limited fashion—refer Table 9 below.

Table 9. Measurement and use of e-mail demand information

Country	Demand for e-mail is measured	Email demand volumes			The information is used to identify drivers & root causes
		2008	2009	2010	
Australia	✓	26,815	28,241	19,485	✓ (limited)
Austria	✓	98,049	110,468	123,578	✓
Belgium	✓	See Paper	See Paper	See Paper	✓
Canada	n.applic.	0	0	0	n.applic.
Chile	✓	15,390	22,273	21,570	✓
Denmark	✓	350,000	345,000	400,000	x
Estonia	✓	14,136	23,202	28,590	✓
Finland	x	0	0	0	x
France	x	500,000	500,000	600,000	x
Hong Kong	✓	157,187	162,781	101,514	✓
Hungary	x	28,722	44,377	39,029	x
Italy	✓	33,333	44,452	56,294	✓
Japan	n.applic.	-	-	-	n.applic.
Korea	n.applic.	-	-	-	
México	n.applic.	-	-	-	n.applic.
Netherlands	n.applic	-	-	-	n.applic
New Zealand	✓	2,460,842	3,210,886	607,649	x
Poland					
Singapore	✓	215,178	258,204	220,478	✓
Spain					
Sweden	✓	210,000	280,000	400,000	✓
Switzerland	✓ (partially)	35,000 /1	45,000 /1	80,000 /1	x
Turkey	x				x
UK	x				x
USA	✓	40,000	47,000	52,000	x

/1. All data volumes relate to VAT administration only.

Methodologies and technologies for measuring demand

54. Similar to the paper channel most revenue bodies providing the e-mail channel are able to measure demand to this channel either through an automated system or manually. Some revenue bodies treat this channel similarly to the way they measure and manage their paper channel.

- *Denmark*: We use a system called Remedy to measure the demand for the e-mail channel. The registrations are uploaded to our datawarehouse, from which different reports are made and presented via a system called xCelsius. But the system doesn't give us a determination of the root causes for the demand. Like the case of our Inbound calls to our call centre, we are going to try to analyze this in our project called Minimising customer contact.
- *France*: The measures for the e-mail channel require development. The volume of e-mail directly received from taxpayers in local offices are not measured. The only measure the revenue body has concerns the volume of e-mail coming from its web contact forms on the web portal 'impots.gouv.fr.' For these messages, it is thus possible to analyse the reason of the contact. However, no analysis has been undertaken to date since this represents a very small portion of the global volume of e-mails received from taxpayers.
- *Hong Kong*: The revenue body maintains a number of public e-mail accounts. Emails sent to these accounts are centrally processed by the Internet E-mail Archival System (IEAS). Taxpayers send e-mails to these accounts according to the subject matters (such as profits tax, business registration, stamp duty, etc). Each e-mail account aims to serve one type of enquiry. A daily, weekly and

monthly report on the number of e-mails received for each account is generated by the system automatically.

- *Italy*: Information on services provided by webmail (i.e. customer type, service type, processing time) are collected and classified. Specifically, we don't use a "classic" e-mail, but a webmail that is transmitted via the website, through a specially designed form, which can address the issue directly to the area of responsibility.
- *Singapore*: myTax Mail (mTM) – mTM is a secure e-mail system for taxpayers to correspond with us via e-mail. Taxpayers have to select the category of enquiry in his e-mail. Reports can be generated to show the total number of e-mails received and the aging profile of e-mails. mTM was introduced in Dec 2010. We are still looking into enhancing the reports further to include the nature of e-mails received to facilitate our analysis of demand. For now, further extraction of data can be done to know the number of e-mails received under each category of enquiry.
- *United States*: E-mail is not widely promoted and is not viewed as a robust delivery channel now. Contact topics are categorised within the e-mail system allowing for a match between topic and assistor skill. Limited usage of the system diminishes the value of in-depth analysis as it can not provide an overreaching view of current or historic demand trends in the contact centre environment.

Ability to determine the driver and root cause

55. Those using automated systems to measure demand are able to determine the topics but not the root cause of the contacts without further analysis. Some of the revenue bodies use web forms that facilitate classification of the e-mail contacts by topic but do not provide root cause determination. Two revenue bodies indicated that they do determine root cause through the analysis of data captured by agents.

Benefits and challenges

56. The methodologies and technologies being used to measure demand on the e-mail channel generally do not provide revenue bodies with the ability to identify the root causes of demand. As indicated above further analysis will provide this information; however, respondents indicated this step is costly and time consuming.

Effecting change

57. Private sector advice sought in the course of preparing this note suggests that while understanding the drivers and root causes of service demand is important, effecting change with this information requires planning and development of an action plan.⁸ Often, the root causes of demand are found to be the result of actions, communications or business processes external to the area actually providing the frontline service to taxpayers. These root causes may result from processing activities, notices or correspondence sent to taxpayers, or wording in publications, to name a few examples.
58. To reduce demand, it is typically necessary to affect change throughout the organisation, specifically in those areas where the root cause originates. These changes may be as simple as clarifying the wording in printed publications or on an organisation's web site or as complex as changing business processes and system outputs.
59. Similarly, shifting demand strategies are more aligned to understanding the taxpayers needs and expectations and then taking action to ensure that the most cost effective service options or channels are designed to address these needs.
60. Managing demand in-channel generally requires actions to be taken or processes or technologies to be implemented that provide a self-serve option that reduces avoidable

⁸ Erika Van Noort (Bell Canada) in a presentation made to the Forum's Taxpayer Services Sub-group, September 2011.

and/or unnecessary repeat contact and ensures that taxpayer needs are fully addressed at the first point of contact. This could range from ensuring channels are staffed to meet demand or staff are trained to facilitate first point of contact resolution.

61. The survey sought to determine whether revenue bodies are using the knowledge gained about demand drivers and root causes to develop demand management strategies and, if so, what oversight exists to ensure action is taken to reduce, better manage or shift demand to more efficient/accessible channels. Specifically, it posed the following questions:
- When the driver or root cause of service demand has been identified, are the findings communicated to the channel manager and/or throughout the tax administration?
 - From an enterprise wide perspective, is there a specific governance structure in place to ensure that root causes are assigned to the appropriate area in the tax administration, and once assigned, that they are addressed?
 - Is the impact of changes made to address the drivers and root cause of demand measured?

Communication of drivers or root causes

62. Most revenue bodies reported that when the drivers or root causes are identified they are communicated to the channel manager and in some cases to channel partners throughout the tax administration. Generally the communication process is informal and there is considerable variation in the consistency of reporting. Many indicated that efforts to identify the drivers or root causes are made only when there has been an unanticipated spike in demand which warrants further analysis and recommendations for change. Countries reported:
- *Australia*: In-person- There is no specific channel pathway to escalate issues that could reduce or shift channel demand. There are informal channels which are utilised. Paper- Significant changes in demand are communicated to the capability leader and the topic owner through high level product volume monthly reports. In bound phone. There is no formal pathway to escalate issues that could reduce or shift demand. However, there are informal channels that are used.
 - *Finland*: e.g. when unexpected phenomenon is identified, When fiscally significant problems or changes occur (in customer behaviour), necessary steps are taken (e.g. outbound , proactive guidance), when an unexpected amount of feedback is sent on specific subject, risk management generates analysis on demand drivers.
 - *Hungary*: the findings are passed on through the Management Information System as well as through the informal channels (in the frame of the daily work).
 - *Japan*: Whenever it is judged to be necessary, NTA lets appropriate officials know this information or solution.
 - *Singapore*: The channel manager(s) monitor(s) the drivers and causes of demand regularly. This is done through the monitoring of reports and meetings with staff. The findings are communicated to the respective stakeholders (i.e. other divisions) whose processes or initiatives have direct or indirect impact on the demand.
 - *United Kingdom*: Both baseline data and improvement solutions are communicated on a regular basis to identified “ business owners”. A governance system has been created to manage that, bringing together the various stakeholder and decision makers on a regular basis.

Governance processes and demand management

63. Many of the respondents indicated that some governance or oversight exists to ensure that the drivers or root causes of demand are communicated to the appropriate areas within the revenue body for the development of action plans to effect change. In many cases this governance consists of the existing senior management performance reporting infrastructure as opposed to a structure created and dedicated specifically to demand management. However, a few countries did describe specific governance structures that currently exist—see the example in Box 3 from the United Kingdom—or mentioned plans to implement such oversight.
64. In addition a few revenue bodies reported governance structures that are responsible for specific aspects of demand management such as the issuance of notices that could affect demand. Examples of responses include:
- *Australia*: There are various enterprise wide governance and management structures in place that look at service demand, from a forecasting view point but do not specifically address root causes.
 - *Denmark*: A high level governance structure is in place, but processes for the definition of the root causes of service has not yet been determined.
 - *Finland*: The revenue body is currently undergoing reorganisation to support the demand driven service supply. Already existing, across organisation functioning, Service unit currently develops methods to identify demand drivers and the so called Channel coordination group will be addressing demand management issues within and across channels. Also local officials in tax office that are in charge of customer service are involved in recognising demand drivers.
 - *Hong Kong*: IRD has a Service Standards Committee which is chaired by the Deputy Commissioner (Operations) with members coming from different operating units. The Committee meets quarterly to review the services delivered by IRD.
 - *Italy*: The governance structure calls for peripheral structures to put in place actions to manage the problems that emerged.
 - *Mexico*: The tax administration has two central government structures to deal with the channel process; one oriented to the technological infrastructure and communications and another responsible for channel management process (strategy, tactical and operative).
 - *Netherlands*: Based on different steps in the learning circle process used by the revenue body, a business case is formulated. This business case lists the costs and benefits of possible changes and identifies the persons responsible for each process. Service delivery and the owner of the business process work out the business case together. The owner of the process is responsible for making changes to his process.
 - *Turkey*: The Strategy Development and Taxpayer Services Departments gather the information, identify areas needed for effective service delivery and set related units in motion.
 - *United States*: There is an established service committee that briefs executives. The findings are assigned to the responsible areas and strategies are developed and monitored.

Box 3. UK example of demand management process and governance structure

A Demand Management process has been implemented which ranges from identifying the reasons taxpayers contact HRMC, to involving programme areas across the organisation in the development and implementation of action plans to mitigate or reduce demand. Oversight is provided through a governance structure that consists of formal monthly meetings to discuss the process findings and evaluate the results of demand mitigation action plans

A key factor for the Demand Management process has been to deliver results at minimum cost and is designed to have low technology impact. Calls are classified by a group of call centre agents into categories which reflect the reason or types of calls. A sample group of agents then record the nature of each call based on the established categories. The information is collated, grossed up to national levels and included on a weekly “Skyline” report. This report provides information on call trends, the cost to serve, percentage breakdown, and business owners for each category. A value is then assigned to each category (e.g. high value for the customer, high value to HRMC, high value to HRMC, low value to the customer, low value to HRMC, high value to the customer, low value to HRMC, low value to then customer) to allow HRMC to determine whether to eliminate, migrate the calls to another channel, or maintain them in the telephony channel.

Call centre agents also use this information to identify the driver and root cause of the call as well as any potential solutions, which are logged into a Voice of the Customer Postcard System. Analysis may also be done in a live call environment, again for the agent to identify the driver and root cause. These reports are compared to the Skyline report to identify solutions to both specific and generic problems and assign priorities based on the volumes. Analysis may also include discussions with the programme areas to complete a deep dive as to the issue and potential solutions.

With the problem and potential solutions identified proposed redesigns are discussed at monthly Demand management and Program and Process Owner Governance Meetings. At these meetings the redesigns are assigned to the appropriate areas for action. As part of the Demand Management process the United Kingdom has also implemented a Contact Gateway to manage and control the creation of new demand caused by new products or changes to existing products.

Measuring the impact of changes

65. Measurement of the impact of changes made as a result of the analysis of demand varied by channel with most revenue bodies reporting measurement is typically done only after the implementation of major changes and is restricted to the in-bound call and in-person channels. Results are generally at the overall demand level due to a limitation of data available that identifies specific drivers through performance reporting systems.
- *Australia*: Benefits realisation is conducted on large change initiatives.
 - *Canada*: Where the drivers have been identified as a result of exceptional circumstances the demand volumes are monitored to evaluate the impact of action taken.
 - *Estonia*: Assessments are made if changes/projects have been made.
 - *Italy*: In critical cases, management performs constant monitoring to ensure that actions are decisive.
 - *Hungary*: The impact of changes are traced and followed up through MIS and statistical data.
 - *Korea*: We measure the number of calls for the same request to see if the calls have decreased as a result of the change.
 - *Singapore*: When changes are implemented to address the root causes of a demand, trend analysis will be conducted for that particular demand.

Strategies to manage service demand

66. Demand cannot always be predicted, and changes to address the root cause of increased demand cannot always be made quickly. Over half of the revenue bodies surveyed (17) reported having a demand management strategy with two others stating that while they do not have a formal (written) strategy, general direction is given.

- The common themes for all of the revenue bodies that reported having a demand management strategy were to increase taxpayers' use of self-serve and online services to reduce demand and resource utilisation on the other more expensive channels and to make interactions easier and more accessible for taxpayers (*most*).
 - Many of the strategies recognize that while moving to self-service is the preference for the revenue body, taxpayer expectations must be addressed. This results in a continuing focus on providing quality service on traditional channels. (*Australia, Finland, Hong Kong, Singapore, Sweden, New Zealand, United States*).
 - Most strategies include enhancing online services to provide a wide range of information and transactions thereby encouraging its use; some reference efforts to decrease paper outputs and downloading of forms (*most*).
 - Some countries also emphasised the need to ensure their strategy takes into account all channels and directs taxpayers to the channels where the best and most efficient help is available to address the needs of taxpayer segments (*Netherlands, Sweden, United Kingdom*).
 - In keeping with the objective to reduce costs many identified the in-person channel as the one channel in which they most wanted to reduce demand (*Australia, Canada, Chile, Finland, Italy, Mexico, Singapore, Turkey, United States*).
67. Within the context of implementing demand management strategies revenue bodies identified a number of specific tactics and actions, some being used across all channels, others targeted to specific channels or specific taxpayer segments. For example:
- *Emerging technology:*
Australia – is investigating new technologies to provide more timely advice and guidance. One of our key strategies is to continually increase online access to guidance products and calculators to support taxpayers.
 - *Simplifying compliance:*
Singapore – strongly believes that no need for service is the best service so we try to remove taxpayer's need for service by simplifying our tax rules and designing processes from taxpayers' perspective.
Hong Kong – adopts an EEC service strategy. EEC effectively means that the tax information we provide must be Easy to understand, tax returns must be easy to complete and we shall be in communication with taxpayer.
 - *Marketing, education and outreach:*
Mexico – through the Tax Culture Program, educate and promote the use of electronic services.
New Zealand – Inland Revenue utilised text messages for the 7th February income tax due date. This campaign targeted three specific groups of customers; 1) those who filed late; 2) those who paid on time; and 3) those who still had arrears from the last financial year.
 - *Controlling outputs that cause demand*
United Kingdom – a contact gateway manages and controls the creation of new demand caused by new products or changes to existing products.
68. In most demand management strategies, there are elements that focus on reducing demand, shifting demand, and managing the demand in-channel. The survey asked for the specific strategies and actions and tactics for each of these elements. However, as will be noted in the following sections, the tactics identified for each of these elements are similar and stem from the same themes found in the overall demand management

strategy: enhancing the online channel, simplifying revenue body processes and procedures for taxpayers, and improving the efficiency of the service channels.

69. It will also be evident from the following sections that while revenue bodies have not achieved their service objective of migrating taxpayers to the online channel it is clear from the examples provided they have realised a number of significant benefits from the demand management strategies and tactics outlined in the balance of this paper. In general, they have enhanced the quality and accessibility of service offerings in the traditional channels and made efficiency gains.

- Many commented that efforts to simplify legislation and procedures through initiatives such as pre-filled returns have been widely accepted by taxpayers and reduced administrative costs. The implementation of self-service offerings on all channels has reduced costs and improved accessibility to agent assistance by freeing them up to handle the more complex issues.
- Demand management strategies that address when and why taxpayers contact the revenue bodies by staffing to demand, training and equipping staff to deal with multiple tax types in a single contact, implementing technologies such as virtual hold, and queue messaging, have reduced the unnecessary and avoidable repeat contacts. This has resulted in the ability to meet service standards, better manage all channels, increased taxpayer satisfaction and enhanced the reputation of the revenue body.
- All reported increases in the take up of online services, some exceeding “natural growth”. They believe this is attributable to strategies that oversee the continual enhancement of the online services to incorporate the information and transactions sought after in the traditional channels in a user friendly, client centric manner.

70. The following sections provide additional information on each of the reducing, shifting, and managing in-channel strategies as well as the specific actions and tactics used to implement these strategies in an effective manner.

Strategies for reducing service demand

71. Most of the revenue bodies indicated their reducing demand strategy focuses on eliminating unnecessary contact by simplifying rules and processes, providing self-serve options on their in-person, telephone and web channels, and reducing avoidable repeat contact. To achieve these goals a wide variety of actions and tactics have been deployed. Specific examples include the following:

- Understand taxpayers needs and expectations and build service offerings accordingly (*most*).
- Implement self-serve options such as IVRs on the inbound call channel to handle both enquiries and transactions (*most*).
- Expand the online options to provide the information and transactions that meet taxpayers’ needs and expectations in terms of content and accessibility (*most*).
- Eliminate unnecessary and avoidable contacts; resolve enquiries at the first point of contact (*Australia, Canada, United Kingdom*).
- Publish rulings on the web to provide clear, standard information (*Turkey*).
- Provide clear, plain language on web site, in forms and guides and in all revenue body outputs to reduce follow up contacts for additional information or clarification (*Hong Kong, Italy*).
- Simplify tax rules and streamline processes to reduce contacts (*Hong Kong, Canada, Singapore, United Kingdom*).
- Promote, educate and encourage use of self-serve options during interactions on all channels, through advertising and use of the social media (*most*).

- Provide information to third party software developers to then publish in their products (*New Zealand*).
 - Influence other areas that impact telephone channel volumes to level demand to non-peak periods (*Australia*).
 - Pre-populate tax returns (*Singapore, Sweden*).
 - Implement No filing service for applicable taxpayers (*Singapore*).
 - Interact with taxpayers at early stages to achieve understanding and compliance 'right from the start' (*Sweden, Netherlands*).
72. While a number of revenue bodies report that they have seen a reduction in demand, particularly to their in-person channel, they note that it is difficult to attribute the reduction or shift in demand to the strategies that have been put in place. Many commented on significant successes with high IVR take-up rates (IVRs handle one third of the calls in Canada), with Australia attributing a reduction in their agent handled calls to use of an IVR for progress of return. Several countries also indicated that as a result of their demand reduction strategies they are now better able to manage demand on all channels.

Benefits

73. Many of the revenue bodies indicated that they have realised cost savings through the implementation of their demand reduction initiatives primarily because of reduced demand on the in-person channel, but to some degree across the other channels as well. Many noted improved taxpayer access to all channels and an increase in use of the online channel for return filing, downloading of forms and other transactions.
- *Australia* – indicated that their IVR initiatives have reduced back end processing times, call times and incoming calls to agents. They have also seen a reduction in the number of taxpayer visits to obtain publications. The assumption is that taxpayers are shifting to the electronic channel and downloading publications.
 - *Canada, New Zealand and United States* – have seen increases in customer satisfaction.
 - *Singapore* – has seen decreases in demand over most channels, they indicated that they were able to meet service standards across all channels because of the reduction in contacts.
 - *Chile* – by lowering the demand for procedures that involve interactions with an official of the institution and increase demand for self-attention tools, we can see a significant reduction in costs for both the tax to the taxpayer to meet its obligations.

Challenges

74. The challenges identified by the respondents related to the implementation of demand reduction strategies are varied and include the following:
- *Australia* – One of the ATO's main challenges is to coordinate the number of mail outs or outbound correspondence targeting specific client groups and ensure that the chosen channel can cope with the client demand. Where a channel becomes overburdened clients will choose an alternative channel such as the on-site channel to resolve their issue.
 - *Chile* – the challenges were mainly cultural and especially with the counters.
 - *Italy* – low level of computerisation of users and the digital divide (from a technological point of view).
 - *New Zealand* – While call volumes are decreasing the average handling time is increasing. Current focus is on building the capability to sell self-service channels

particularly in our contact centre representatives and managing the number of self-service messages so the customers get an integrated story.

- *Singapore* – the greatest challenge is the process of exploring, generating and concretising ideas and challenging the status quo to reduce or remove the taxpayers’ need for service.
 - *Sweden* – sometimes revenue body staff think they understand taxpayers’ situation based on experience from within the administration, when in reality their views are biased and they do not see the cause of demand from the taxpayers’ view; as a result, there can be too much focus on the channel rather than the situations of the taxpayers.
 - *United States* – multi-channel development is both time consuming and costly.
 - *Turkey* – are shifting demand to electronic services; however, some taxpayers doubt the reliability of electronic services and therefore choose other options.
75. Most of the respondents indicated that they are closer to their service delivery end state and a number indicate they are now developing strategies that concentrate on the further evolution of the online channel based on experiences to-date.
76. The in-bound call channel continues to see high demand in spite of the number of electronic service offerings. Some countries also indicated that the increase in the self-service channels has led to an increase in the complexity of the calls received in the in-bound call channel.

Case study and examples of strategies for reducing demand

77. Case studies providing examples from Singapore and the United Kingdom of how demand has been reduced are set out in Box 4 below.

Box 4. ‘Reducing demand’ case studies

Singapore’s ‘No Filing Service’

With the objective of no need for service is the best service in mind, IRAS explored ways and leveraged technology to extensively simplify the tax filing process for its taxpayers and eventually making filing a non-event. It introduced the No-Filing Service (NFS) where certain taxpayers are not required to file a tax return and they will receive a tax assessment directly. This is possible through the extensive auto-inclusion of income and reliefs, where income and reliefs information are obtained from third parties. The auto-included information and prior year’s assessment relief claims are used to finalise the tax assessments for these taxpayers without requiring them to furnish the information.

For many taxpayers who paid their taxes in instalments via monthly deductions from their bank accounts, tax filing and tax payment was practically a non-event since there was nothing else they needed to do to fulfil their tax obligations.

The NFS was introduced on a pilot basis in 2007 to 45,000 taxpayers and the number has since grown substantially to 786,000 (accounting for approximately 46% of the taxpayer base) in the 2011 assessment year. Since the introduction of NFS in 2007 and its expansion in subsequent years, there have been decreases in the contacts received by IRAS during the Individual Income Tax filing period.

United Kingdom Case Study for Reducing Calls

During one of the monthly workshops between the Demand Management Section and the Self-Assessment Product and Process Owner team a significant increase in calls was noted regarding the SA 250 form. These workshops use two sources of data to assess call drivers for the week - the call classification Skyline report and the Voice of the Customer Postcards from the advisors. The Skyline report identified a high volume of calls from customers who had received the SA 250, and were now asking for their Unique Taxpayer Reference (UTR) number to enable them to access the Self-Serve Assessment Services. As the SA 250 includes the UTR these calls are considered very low value. However, it was noted that the SA 250 labelled the UTR as “Our reference”, rather than “Your UTR” which was causing confusion for the customers and driving calls for clarification.

With the problem identified, a session to solve it was held with the call centre advisors to identify the changes to the form that would ensure easy identification of the UTR on the form, thereby eliminating the low value calls. At the monthly Demand Management /SA Product and Process Owner Governance Meetings a proposed form redesign, and business case for funding to affect the form changes was

submitted, approved and accountability assigned to the SA Product and Process Owner . The changes were subsequently implemented resulting in the desired reduction in calls.

78. Table 10 outlines other reducing demand strategies, the specific actions taken by revenue bodies and the resulting impacts.

Table 10. Strategies for reducing demand

Country	Examples of strategies for reducing demand
Australia	An example is the implementation of the Progress of Return IVR, which allows customers to check on the progress of their income tax returns without having to speak to a call centre agent. For example in 2010 over 1 million calls were successfully serviced using this IVR, which would have otherwise gone to an operative.
Canada	The Canada Revenue Agency (CRA) has created an IVR which provides information on individual tax refunds. This service currently gets approximately 2.0 million calls/year. These are calls that would originally have gone to call centre agents.
Hong Kong, China	The introduction of Special Stamp Duty in 2010 has invited numerous enquiries. To reduce enquiries on this new subject, explanatory notes and the frequently asked questions were promptly posted on IRD website.
New Zealand	Our current B2B initiative is providing customer information to 3 rd party software developers to then publish in their products. This approach does not remove the demand but in many cases eliminates the need for customers to interact directly with IR as their detailed tax information is available to them via their software package.
United Kingdom	Examples of strategies eliminating the need for contact, and thus reducing phone calls: <ul style="list-style-type: none"> ✓ Used call classification data to support decision to stop sending out a National Insurance Deficiency Notice, saving approx. 170,000 calls per annum. ✓ Improved the content of the Annual Coding Notice and introduced a flyer both to increase customer understanding. ✓ Reduced reassurance calls from 84% to 40%. ✓ Improved customer advice guide for advisors, streamlined processes and established processing timescales for Tax Credits New Claims process, saving 35,000 calls per month. ✓ Clarifying a customers unique taxpayer reference number on an Self-Assessment Entry form, saving over 100, 000 calls per year. ✓ Improving the layout of the Child Benefits Entitlement form to increase customer understanding, saving 15,000 calls per annum.
United States	Inbound calls: In FY2009 a change to E-Filing procedures resulted in millions of additional telephone calls and may have also resulted in customers that would have E-Filed their return to submit a paper return instead. In FY 2010 both web and telephone self-service applications were implemented and approximately 11 million customers successfully used these applications.

Strategies for shifting demand

79. All of the 17 revenue bodies that reported having a demand management strategy outlined strategies for shifting demand that reinforce the goal of moving taxpayers to the self-serve offerings, preferably the online channel. One additional revenue body commented that in the absence of a formal strategy there is a guideline stating preference for the online channel.

80. Within this context, all of the strategies for shifting demand deploy tactics and actions similar to those outlined in the reducing demand section, with a focus on developing self-serve options, enhancing the online channel and educating taxpayers and strongly encouraging taxpayers to migrate to self-service. For example:

- Expanding web sites to include the information and transactions used by taxpayers on the traditional channels in an easily accessible and user friendly

manner; using a client centric manner web architecture; incorporating web tools , such as calculators to ease compliance (*many*).

- Introduction of self-serve facilities such as drop boxes, stamping machines and Kiosks at walk-in facilities (*Canada, Singapore, United States*).
- Improving accessibility to the phone channel to encourage its use traditionally by walk-in clients (*Canada, Hong Kong, United Kingdom*).
- Implementing IVRs and enhancing IVRs by reviewing the language and style to ensure it meets taxpayer needs; deploying voice biometric checks and natural language speech recognition and voice recognition to expand IVR capabilities (*Korea, New Zealand, Mexico, United Kingdom, United States*).
- Targeting marketing to early adopters of the web (*New Zealand*).
- Using social media and queue messages to deliver messages with up to date information and advising of the availability of information on the web (*Singapore, Canada, United States*).
- Advertising the availability of helpdesks for online services, providing access to helpdesks directly from the web through click to talk technology (*Canada, Singapore*).

81. While the overall objective is clearly to move taxpayers to online self-service, some revenue bodies have mentioned an evolution or transition is required given that some taxpayers, either due to the level of their technology literacy, or the complexity of their particular issue or situation, may not be able to self-serve. Some state that they are encouraging use of their in-bound call channel as the preferred interim step. This is particularly true for those where the in-person channel is the channel of preference at the present time. This further reinforces the point made in the section ‘Strategies for reducing demand’ that there is an on-going need for the provision of quality services to meet the needs of all taxpayers.

- *Australia*: Shifting clients to self-help options is based on whether the client is able to use this option.
- *New Zealand*: IRD has adopted a channel hierarchy model. The objective is to deliver services to customers in the most effective and efficient manner using the appropriate channel for both the customer and Inland Revenue.
- *United Kingdom*: HMRC noted that willing and able customers requesting advice on entitlements could be directed towards online sources (via telephone messages, advertising and sign posting). “Always needs help” customers requesting guidance in completing forms may be encouraged to use helplines (and thus reduce potential error, repeat contact, or fraud).

82. None of the revenue bodies reported having data or measurement capabilities to substantiate that a shift in demand across the various channels has occurred as opposed to natural growth in one channel versus another. However, all reported an increase in the use of the online channel and New Zealand has tracked an increase in that channel that exceeds natural growth. The frustration facing all respondents is the continuation of the phone channel as the channel of preference for taxpayers.

83. Canada, Mexico, Italy and Singapore have experienced reductions in demand on the in-person channel, while Canada and New Zealand have also seen a reduction in paper.

Benefits

84. While there has generally not been a reduction in demand on the in-bound call channel many revenue bodies noted that calls have become more complex leading them to conclude that many simple inquiries are being handled by the IVRs or the web. In addition to the fact that a high volume of calls are handled by the IVR, call centre agents are providing a value added service by dealing with the more complex calls and are generally more accessible. Other benefits from the shifting strategies sited were: 1) reductions in costs, particularly for the in-person and paper channels (*Canada, Chile, Mexico, New Zealand, Singapore*); 2) a movement of demand to days when higher

accessibility is available (*Hong Kong*); 3) enhanced organisational reputation (*New Zealand*); 4) better management of traditional channels (*Singapore, Chile, Hong Kong, New Zealand*); and 5) increased taxpayer satisfaction (*New Zealand, Turkey*).

Challenges

85. Not surprisingly, the list of challenges facing revenue bodies as they implement shifting strategies is significant, for example:
- Taxpayer preference for the traditional channels- especially the phone (*many*);
 - The digital divide/low level of user computerisation (*Australia, Italy, Mexico, Singapore, Turkey*);
 - Some people want to offer as many channels as possible without thinking about the availability of resources (*Belgium*);
 - Recouping actual savings from the phone channel is difficult given natural growth (*New Zealand*);
 - Staff buy-in for the online strategy (*Singapore, Turkey*);
 - The need and costs associated with implementing and increasing help lines and services to meet demand as more taxpayers go online (*New Zealand, Turkey*);
 - Ensuring shift to digital platform does not disadvantage any particular customer grouping (*United Kingdom*);
 - Legislative changes that increase demand (*Australia, Japan, United Kingdom*);
 - Continuing high volumes of postal communication (*Finland*).
86. Many revenue bodies reported that with their strategies in place to shift demand they are closer to achieving their goals for online service.

Case study and examples of strategies for shifting demand

87. A case study of a shifting demand strategy used by Canada is set out in Box 5.

Box 5. ‘Shifting demand’ case study—Canada’s In-person Service Transition

The in-person service transition started in January 2006 with the goal of encouraging clients to migrate to the more affordable in-bound call and online channels, with appointments available when required. The Canada Revenue Agency aggressively encouraged walk-in clients to make this transition through a number of changes to walk-in facilities.

Staff were positioned to greet all walk-ins. They advised clients of the various self- services available and assessed the taxpayer’s situation to determine the optimal service to meet their needs. Telephones with direct access to the call centres were installed in the walk-in facilities and taxpayers with enquiries or wishing to amend their returns were directed to use the phones. This educated walk-ins of the wide range of services readily available through the call centres and encouraged them to use this option from their homes in future. Self-serve forms kiosks and stamping machines were also installed and the staff directed clients wishing to obtain or drop off documents to these facilities.

Taxpayers wishing to make appointments were directed to do so through the call centres. Call centre agents were provided access to a national appointment system but were directed to attempt to resolve the caller’s issue over the phone. Ninety-five (95%) of those calling for an appointment did resolve their issue at first point of contact. Some offices also did a call back before the scheduled appointments and were successful in further reducing the number that ultimately utilised the appointment service.

Since implementation of this strategy, demand for in-person service has decreased from over 1.6 million in 2005-2006 to less than 240,000 (including 30,000 appointments) in 2009-2010.

88. Table 11 provides examples of other strategies and tactics for shifting demand used by revenue bodies and their impact.

Table 11. Examples of strategies used to shift demand

Country	Examples
Canada	The CRA's project to reduce counter traffic (as described above) was a major initiative that had a large impact on the demand in that channel. This initiative reduced traffic at the counter from 1.6 million to less than 240,000 (including 30,000 appointments).
Chile	Benefits currently given to apply for VAT refunds in the case of exporters on the Internet, changes in deadlines training for accountants, 100% of these statements by this route.
Finland	The Tax Card (Internet-service) has shifted Tax Card changes in four years to the Internet—demand reductions of 23% (in-person) and 28% (call centre). Tax Return has reduced the amount of posted tax returns by 26% (Internet-service for the taxpayer to make possible corrections on the Tax Return sent prefilled via post).
Hong Kong , China	Sending bulk mails at the beginning of the week. The demand for service was evened out to days other than Mondays or after long holidays.
Italy	During 2010, 2,330,701 of the leases (8%) were recorded through the online channel.
Mexico	1. In the case of the annual campaign statement, the agents that attend the requests of taxpayers acquire skills that allow greater experience and knowledge to reduce the time of attention and attend the peak demand. 2. In Q2 2011, the movement of digital signature renewals from the in-Person channel to the electronic channel has exceeded 130, 000 taxpayers, a demand shift of 124%. 3. Individuals who use pre-filled forms to file annual tax returns, doubled in 2011 compared to 2009 (from 9% to 17%).
New Zealand	<u>Tax Agents phoning to request transfers for clients:</u> IRD developed an online transfer mechanism that allowed tax agents to transfer funds in their clients' accounts subject to a set of enforced business rules. This facility removed the need for the higher cost transaction and shifted it to a lower cost electronic channel. <u>Customers phoning to confirm a Personal Tax Summary (PTS):</u> IRD required customers phoning to confirm their Personal Tax Summaries for the 2011 tax year to enter into the voice self-service channel when their query was determined at the NSLR IVR. Account checks and targeted questions occurred to ensure the self-service channel could service the query. This reduced simple transactional queries from having to be handled by an agent.
Sweden	An example is the use of self-services. Instead of calling the call centre to get a form, the taxpayers can access them from the web.

Managing demand in-channel

89. Only 16 revenue bodies indicated having strategies to manage demand in-channel. All of the strategies focused on the same key elements voiced elsewhere in the survey responses: implementing, enhancing and encouraging the use of self- service; and as a fall-back increasing the efficiencies in the higher cost channels that continue to experience high demands.
90. The self-service options were tailored to the specific channels, developed to address the high volume drivers of demand, and included the following:
- IVRs have been widely implemented to handle less complex calls especially during peak periods; many IVRs also provide an option to handle transactions such as ordering publications, establishing payment arrangements and obtaining account specific information. Some are implementing voice recognition capabilities. (*Australia, Canada, Belgium, Hong Kong, Italy, Japan, Korea, Mexico, Singapore, Spain, Sweden, Turkey, United Kingdom, United States*).
 - For the in-person channel, self-serve drop boxes, stamping machines, kiosks or Surf Centres with PCs and internet connections were implemented (*Canada, Finland, Singapore, United States*).

- All countries referred to continuous efforts to enhance the web to include a full suite of information and services to better meet taxpayer needs as well as ensuring a client centric architecture and access to help lines.

91. Recognising that many taxpayers continue to prefer the in-person or in-bound call channel, all revenue bodies with an in-channel demand management strategy reported examples of initiatives to maximize the efficiencies of these channels and reduce the avoidable and repeat contacts. These are set out in Table 12.

Table 12. Initiatives to reduce avoidable or repeat call demand

Type of demand	Description of initiative (and country reporting)
In-person	<ul style="list-style-type: none"> ✓ Appointments which facilitate better scheduling and staffing to demand; when booked through a call centre the agents can deal with the issue and eliminate the need for in-person service (<i>Australia, Canada, Singapore, Turkey, United Kingdom</i>). ✓ Specialised training for in-person staff (<i>France</i>). ✓ Equipping front line agents with the tools and information that enables them to handle multiple tax types in a single enquiry (<i>Singapore</i>).
Call centres	<ul style="list-style-type: none"> ✓ IVRs and voice recognition (<i>most</i>) ✓ First call resolution to reduce repeat contacts (<i>Australia, United Kingdom, Singapore</i>) ✓ Virtual hold technology that gives the taxpayer an option of receiving a call back rather than waiting in queue (<i>Australia, Korea</i>). ✓ A virtual network to connect multiple call centres and send calls to the next available agent (<i>Canada, Turkey, Spain, Finland in progress, United Kingdom</i>). ✓ Training and equipping agents to handle multiple tax types in a single call and perform account maintenance functions to prevent repeat calls (<i>Canada Singapore</i>). ✓ Redirecting calls to centres of expertise to reduce call backs (<i>Canada, Turkey</i>). ✓ Forecasting and scheduling staff to meet demand especially during peak periods; deploying staff from other areas as required (<i>Finland, Hong Kong, Canada, United Kingdom</i>). ✓ Implementing free calls for international taxpayers (<i>Mexico</i>). ✓ Increasing call centre service standards (accessibility) to encourage migration from the in-person channel (<i>Singapore, Canada, United Kingdom</i>). ✓ Voice-mail facility for call backs (<i>Hong Kong, Singapore</i>). ✓ Increased communication - publication of peaks hours to even calling patterns (<i>Singapore</i>); press releases, website, message via IVR, etc. (<i>Belgium</i>). ✓ In-queue announcements as to availability of information on other channels (<i>Canada, Finland, United Kingdom, United States</i>). ✓ Developing a databank of standard answers for call centre agents (<i>Turkey</i>) ✓ Establishing a Contact Gateway to ensure minimal low value or avoidable contact is not created by new products or processes (<i>United Kingdom</i>).

Benefits

92. All revenue bodies reported an improvement in terms of the quality of service for taxpayers and ease of management for the revenue bodies. General comments indicate an improved taxpayer experience with efficiency gains for revenue bodies becoming apparent. Benefits identified by the revenue bodies include: 1) general efficiency gains (*most*); 2) increased taxpayer satisfaction (*Canada Hong Kong, Japan, Mexico, Sweden, Turkey*); 3) increased cost savings for staff (*Canada, Chile, Hong Kong*); 4) the ability to better align staff and staff training to demand (*Australia Canada, Finland, Mexico*); 4) improved access to agents (*Canada*); 5) an increase in calls handled (*Italy, United States*); 6) reductions to call abandonment rates (*Australia*); 7) better use of resources as

agents can handle more complex issues (*Canada, United States*); 8) improved staff morale (*Canada*); and 9) reduced compliance cost for taxpayers (*Chile*).

Challenges

93. The major challenge with managing demand in channel continues to be the taxpayer's resistance to self-service and online service offerings. As a result, despite significant investments in the online channel, which must be tailored to customer expectations, expenditures remain high in the traditional channels. Other specific challenges were:
- Balancing the implementation of technology changes with customer expectations and staff satisfaction (*Australia*);
 - Complex enquiries are not well served by IVR's (*Canada*);
 - It takes time to implement automated strategies to migrate demand (*United States*);
 - The better in-person reception is, the more taxpayers come (*France*);
 - Some callers prefer to speak to telephone agents (*Hong Kong*); and
 - Training front-line agents to handle multi tax type enquires (*Singapore*).
94. Once again revenue bodies reported they are closer to their end state as the effectiveness of existing channels has been and continues to be improved. With more manageable demand taxpayers who need assistance are able to obtain assistance through existing channels. However, work continues to identify opportunities to automate services and maximize efficiencies.

Case study and examples of managing demand in-channel strategies

95. A case study provided by Australia for managing demand in-channel is set out in Box 6.

Box 6. 'Managing Demand' case study (call in channel)—Australia's use of IVR

The ATO provides self-help IVR services to customers allowing them to complete a range of transactions without the need to speak to a service representative. Self-help services are available 24 hours a day, seven days a week. Almost half of the enquiries received by the self-help IVR services, or 1.7 million calls, relate to customers checking the progress of their income tax return.

Customers who call one of the ATO's general enquiry lines and select the IVR option to enquire about the progress of their return are seamlessly directed to the self-help service. Customers are required to enter some information to identify themselves to the system. As the IVR system does not provide specific information about a customer's tax account, less stringent proof of identity (POI) is required. The reduced POI requirements results in more customers completing their enquiry without the need to speak to an ATO officer.

During the 2010-11 year, 61% of all progress of return enquiries delivered to the self-help service were successfully handled by the system, keeping more than one million calls out of the contact centre. Conservative estimates equate this to an approximate saving of 190 service representatives.

Once a customer has identified themselves, the system will check the customer's tax account for a return filing. Based on business rules, the customer is either played an informative message about the progress of their return or transferred to a service representative. The key aspect of the business rules is to check whether or not the lodgement is within processing timeframes. If a lodgement is within the relevant processing timeframes and not yet issued, customers are advised of these timeframes and the date that they should call back. If a lodgement is outside of timeframes, the call will be transferred to a service representative for further investigation. If an assessment has been issued, the customer is provided with the issue date.

The ATO is currently working on a new online self-help service to assist customers with progress of return enquiries.

96. Table 13 provides other examples of strategies used to manage demand in-channel.

Table 13. Examples of managing demand in-channel

Country	Examples of managing demand in-channel
Canada	In the telephone channel, CRA has introduced IVRs. During peak benefit periods excess demand is directed to the IVR for simple enquiries which frees up agents to handle more complex enquiries and increases the total volume of calls handled.
Chile	Benefits currently given to apply for VAT refunds in the case of exporters on the Internet, changes in deadlines training for accountants, 100% of these statements by this route.
Hong Kong, China	Helping hands from other sections assisted in handling demand during the very peak period. Callers are more satisfied.
Italy	The service called "Civis", accessible via the revenue body's website, is dedicated to the taxpayers who receive notices of irregularities as a result of formal/automatic control of submitted tax returns. Requests for assistance are submitted online to one of the local offices (on the basis of real-time workloads) of the region where the taxpayer is located. During 2011, about 20% of these communications are coming from CIVIS channel.
New Zealand	Inland Revenue (New Zealand) has two providers that verify documents for customers applying for an Inland Revenue number. These providers view the supporting documentation that customer provide and complete an application that is sent onto Inland Revenue for processing, this application includes the supporting documentation (photocopy) that has been verified by the providers.
Singapore	To provide a one-stop service for our taxpayers, IRAS embarked on a project—Project Frontline—to consolidate its frontline services (i.e. helpline and walk-ins) in 2008. With this initiative, taxpayers' experiences are enhanced as they are able to resolve all their enquiries, even if it involves different tax types, at one point of contact. This facilitates taxpayers in fulfilling their tax obligations and makes it easier for them to comply. With the consolidation, taxpayers only need to call one helpline number for assistance in individual and property tax matters (previously, there were four separate helpline numbers). It has resulted in a 62% reduction in referred calls between helplines in the six months after the implementation of Project Frontline, as compared to the corresponding period in the previous year before the implementation. There is also a reduction in the overall number of contacts as before the consolidation, taxpayers had to make several points of contact with different helplines in IRAS to resolve their enquiries for different tax types. After the consolidation, they were able to resolve all their enquiries at one single point of contact by speaking to a frontline officer who is trained in multiple tax types.
Sweden	The STA can see a reduced demand at its switchboard, having implemented one single phone number for its contact centre and switchboard and integrated the switchboard as first choice in its IVR capability.
United Kingdom	Examples of shifting phone demand with automated telephony messaging (IVRs): <ul style="list-style-type: none"> ✓ Built a telephony-based Correspondence Turnaround tool to reduce progress chasing calls, saving around 405,000 calls per year on PAYE Repayments alone. ✓ IVR informing customers of changes to payment dates over bank holidays handling up to 80% of queries over the Christmas period. ✓ IVRs telling customers what information they need to successfully complete a Tax Credit Renewals call with an advisor saved 100,000 otherwise failed calls. ✓ Dead-end IVR telling customers they have rung the wrong number handled 143,000 calls in first four months of operation with no complaints.
USA	Playing estimated wait times for customers when placed in queue for assistors allows the customer to make an informed decision on whether they are willing to wait for service during peak periods.

Managing peak demand

97. All revenue bodies experience significant peaks in demand driven largely by the legislated obligations for filing of information and remitting payments. For those revenue bodies that issue benefit or income redistribution payments peaks in demand result from the

recipients of those payments. Peaks will also result from the announcement and implementation of changes to existing or new legislative provisions. Typically these significant increases in demand are experienced on all channels and necessitate the implementation of strategies targeted at ensuring taxpayer expectations are met in a cost effective manner. Table 14 below outlines the strategies currently being utilised by revenue bodies to address such service demand peaks.

Table 14. Strategies to address peak period demand

Peak period demand causes	Strategies/measures used to address peak demand
Return filing/ lodgement dates	New staff recruited with combination of casuals and part time staff: <i>Australia, Belgium, Canada, Mexico, Finland, New Zealand, Hungary, Mexico, Singapore, Spain, United States</i>
	Reallocation of staff from other areas: <i>Australia, Finland, Hong Kong, Hungary, Finland, New Zealand, Sweden</i>
	Use of overtime: <i>Australia, Hungary, Hong Kong, Korea, Mexico, New Zealand, United Kingdom</i>
Yearly superannuation contributions	Non-phone staff assist with administrative duties to free up phone staff to take calls: <i>Australia, New Zealand</i>
	IVR: <i>Canada, New Zealand, Sweden, United Kingdom, United States</i>
	Issuance of notices on the web—e.g. payment issuance dates, banner messages: <i>Canada, New Zealand</i>
	Queue messages on phones: <i>Canada, United Kingdom</i>
Payment due dates	Implementation of Virtual call centre model: <i>Italy, Finland, United Kingdom</i>
	Continuous consultation with business areas to refine processes, reduce demand and manage output dispatch schedules to spread demand: <i>Belgium, UK</i>
	Implementation of online procedures to dynamically manage the load (transfer to other offices): <i>Italy</i>
	Establish temporary venues for filing returns: <i>Japan, Singapore, Turkey</i>
Benefit payment issuance	Accepting returns and responding to consultations on holidays: <i>Japan</i>
	Establishing phone consultation centre for filing period: <i>Japan</i>
	Volunteer programmes to assist taxpayers to file returns: <i>Singapore</i>
	Use of handheld mobile device in walk-in centres to answer simple, straight forward enquiries: <i>Singapore</i>
Bulk issuance of returns to taxpayers	Mobile services for taxpayers: <i>Singapore, New Zealand</i>
	Issuing SMS messages to taxpayers to remind them to file: <i>Singapore, New Zealand (piloting)</i>
	Prefilled tax returns: <i>Spain</i>
	Appointments to assist with return preparation and provide responses to enquiries: <i>Spain, United States</i>
Publication of new legislation	Co-operation with certified public accountants to provide assistance to taxpayers about filing returns: <i>Turkey</i>
	Planning and scheduling to forecast demand in call centres: <i>Turkey, UK</i>
	Increase outreach: <i>United States</i>

IV. LEARNINGS FROM THE PRIVATE SECTOR

98. Earlier chapters to this report outlined the findings from a survey of revenue bodies participating in the Forum’s Taxpayer Services Sub-group on their strategies and approaches for managing service demand. To supplement these findings the project task group researched demand management approaches and strategies within a selection of private sector organisations.
99. In discussions among members of the Taxpayer Services Sub-group it was acknowledged that revenue bodies differ from the private sector in that they are government bodies, are non-profit, operate as monopolies without competition and require mandatory attention from their customers. However, it was also recognised that taxpayers expect revenue bodies to provide the same types and standards of services offered by the private sector. In addition, in a challenging economic environment, both public and private sector organisations must find ways to “do more with less” and ensure the most effective use of their scarce and, for many, diminishing resources.
100. From a review of the private sector approaches to service delivery it is evident that many such organisations have engrained demand management methodologies within their service delivery models and are using demand management approaches effectively to identify the areas or issues that are problematic for customers and costly for the organisation to manage.
101. The range of examples included in this report varies from financial, insurance and telecommunications institutions to technology service providers. Although there are differences in their mandates and objectives all organisations declare that effective and efficient service provision is fundamental to their success. They also share the common goal expressed by revenue bodies elsewhere in this report, that of striving to move customers to a self-serve, preferably online, environment. However, many have indicated that they recognize that services should be tailored to the specific needs of their client segments and, as a result, they are focusing on moving the “right” services, as opposed to all services, to their online channels.
102. Drawing on this external research some key themes and lessons emerge as being prevalent in the private sector demand management practices:
- Using the voice of the client /client interactions to understand their needs, expectations and challenges in dealing with the organisation;
 - Driving the information gathered throughout the organisation to make changes in non-value processes;
 - Engaging other parts of the organisation to address issues, maximize efficiencies and improve the customer experience; and
 - Using emerging technology to both analyse and better manage demand.

Using the voice of the client

103. Private sector advice presented at the September 2011 meeting of the Taxpayer Services Subgroup emphasised that service quality goes beyond agent behaviour, citing research findings that show that agent performance is generally a small portion of caller complaints.⁹ It was indicated that agent-based complaints typically make up between 20-25% of all complaints and are generally a result of the failure to follow procedures, knowledge gaps and behavioural issues, while company-based issues such as product/service deficiencies, marketing policies, billing errors and broken processes are the cause of between 55 to 65% of complaints.

⁹ Erika Van Noort (Bell Canada).

104. All of the private sector examples provided by revenue bodies indicate that the primary step for managing demand is the measurement and analysis of interaction with clients to understand the root causes or why customers/clients are contacting an organisation. They also identify what contacts can be eliminated by addressing issues in the organisation's policies, procedures and business processes, know the metrics and determine what calls can be better served by self-service. Several organisations also described their more detailed use of this information as it pertained to particular client segments with the objective of tailoring services to their specific needs.
105. As for the methods or tools used, similar to revenue bodies they vary from surveys to the use of voice analytics. As stated in the United States example..... *"This government support contractor operates from a mind-set that measuring demand requires utilisation of many tools within the Contact channel and that a solid integration between these tools is essential to effectively and efficiently respond to fluctuating demand. Data provided by each of these systems enables root-cause analysis and the systems themselves allow for the business to make rapid changes to positively affect demand"*. In many of the examples provided reference was made to using multiple approaches for root cause determination supported by strong feedback processes.
106. One major difference between the public and private sector is that many private sector organisations have implemented technology to assist in the determination of causes of contact, thereby realising significant efficiency gains over the more labour intensive methodologies reported by the revenue bodies. As stated by WPS Health Insurance..... *"The benefit was the analytics uncovered the problem faster for us. Instead of trying to find a needle in a haystack, what were able to do is understand where the haystack was and the analytics helped us find where the needles were."* (Voice of the Customer, Contact Management (www.contact.management.ca), March/April 2010)
107. In addition, the private sector has gone beyond using analytics for measuring existing incoming demand to providing insights for policy and programme development. The Bank of Montreal indicated..... *"We attempt now earlier in the cycle of either a marketing campaign or pricing changes or product launches, to forecast what we will be listening to after the launch. We get together with the Voice of the Customer folks, brand marketing, product development, and finance folks to figure out—okay if we did it this way how would the customer react?"* (Voice of the Customer, Contact Management, March/April 2010).¹⁰

Driving the information gathered throughout the organisation/engaging other parts of the organisation to address issues

108. Bell Canada is another private sector organisation with experience in improving its own customer experience. It places considerable emphasis on the development of feedback processes to share the information gained on root causes of contact throughout the organisation. This is supported with a strong enterprise-wide governance structure to oversee the development and implementation of plans to address issues and the non-value processes for clients. An important lesson from their experience is..... *"maintaining buy-in is harder than getting it"* and *"everyone needs to understand the impact of their decisions on the customer experience"* (Van Noort).
109. This same focus/emphasis was echoed in the private sector example provided by the United States, where strong feedback processes and collaboration between business areas and IT were identified as *"key lessons learned"* and *"essential to an efficient operation"*.
110. Responses from revenue bodies indicated that feedback processes tended to be informal and governance consisted of the existing performance monitoring structures within the revenue bodies that may or may not have a focus on drivers of demand. By comparison the Bank of Montreal (BMO) reported that a Bell Canada analyst..... *"performs special analytics and holds quarterly meetings attended by BMO IT personnel, executives and representatives of key stakeholder departments where she brings up pertinent*

¹⁰ See www.contact.management.ca

topics.....*With all the cross representation of many teams within the product line and service, we are able to get to the barebones of an action plan together right there during that meeting. Inevitably someone is assigned to carry it out.*” (Voice of the Customer, Contact Management, March/April 2010).

111. In addition to discovering irritants and issues for clients, ING Direct commented on how voice analytics are being used to perfect, and thus encourage the use of online services.....
“In one instance the bank adjusted a web application to make it easier for customers to apply for a mortgage online. Through speech analytics we found it was not as easy as we thought. We had to go back and do some tweaks to that online application to make it more intuitive for clients,” (Voice of the Customer, Contact Management, March/April 2010).

Use of emerging technology to analyse and better manage demand

112. From the examples provided by both from task group members and Bell Canada it seems fairly clear that the private sector is at a much more mature stage in the implementation of emerging technologies for the analysis and management of demand. In the numerous examples cited earlier in this chapter technology has provided the advantage of being less labour intensive to use, as well as providing more timely, quantifiable data that resonates more loudly throughout the organisation to all stakeholders.

113. Several examples also highlighted the extensive use of technology to manage demand more effectively. In the United States example, reference is made to a service model that strives to make each of the channels in use as efficient as possible and goes on to describe a complete suite of technologies for call routing, self-serve applications, forecasting and scheduling and call recording. The description states..... *“Each of these technologies was carefully selected to ensure customer experience and demand could be carefully managed and measured”*.

114. This same example goes on to outline how a structured approach to determining and implementing technologies has led to effective demand management..... *“Short term, mid-term and long-term objectives were established, setting a road map for implementation and positioning the organisation for future growth. Short-term objectives were accomplished quickly and service levels improved to acceptable levels almost immediately. In stepping through the roadmap, which included technological and process changes, the organisation was able to effectively implement technologies and processes that significantly improved their ability to manage and respond to shifts in demand”*.

V. IDEAS/PROPOSALS FOR GOING FORWARD

115. In the preceding chapters, the report has outlined revenue bodies' experiences with deploying demand management methodologies and technologies to determine why taxpayers are contacting them as well as governance structures and demand management strategies currently being used to influence demand in both the public and private sectors.
116. While it is evident that all revenue bodies are involved in demand management activities, it is clear from the survey responses that most are at the early stages of analysing the topics of demand with a view to reducing or shifting that demand to self-service or the online channel. Only a few have progressed to employing strategies and technologies, as well as enterprise wide governance structures, to determine the root causes of this demand and to eliminate the demand through changes to business processes.
117. At the Forum's Taxpayer Services Sub-group meeting in Dublin, September 2011, there was considerable interest in the use of demand management methodologies, as described by Bell Canada's representative, and the potential benefits of expanding the reach of demand management.
118. Armed with the survey responses and insights to the private sector successes a number of proposals for future consideration were raised by delegates at the Taxpayer Services Sub-group, including:
- Development of practical guidance on an end-to-end process for demand management;
 - Updates of the experiences and benefits of the voice analytics and emerging governance structures currently being implemented in a few revenue bodies;
 - Identification of appropriate governance structures to oversee and affect demand management change on an enterprise wide basis; and
 - Outline of a process for using demand management information to influence future policy and programme development.

Development of practical guidance

119. While the mandates and operating environments of revenue bodies vary from those of the private sector, the service expectations of taxpayers are, to a large part, developed based on their experiences with the private sector. Similarly, in the current economic environment the objective of maximising efficiencies is common to both. However, it is apparent from the research practices that the private sector is considerably further ahead in terms of implementing a more extensive approach to demand management that includes measuring, managing and eliminating demand. Revenue bodies would benefit from practical guidance that outlines the type of end-to-end process seen in the private sector examples.

Experience with the use of voice analytics

120. The survey revealed that two revenue bodies are at the early stages of implementing demand management voice analytics and one other revenue body is planning an opportunity analysis pilot of this technology. Another revenue body reported on the use of an alternate end-to-end process for root cause analysis with the objective of reducing and shifting demand. All revenue bodies would benefit from periodic updates as to the experiences, challenges and successes of these initiatives. This information would be valuable for determining whether either approach would be a viable option for their particular situation and if so to assist in the development of a business case.

A governance structure for demand management

121. One of the key findings from the review of private sector research was the importance of an enterprise wide governance structure to affect change in those areas responsible for the root cause of demand. Research into and documentation of governance structures that have effectively contributed to the implementation of demand reduction strategies would benefit all revenue bodies.

Influencing future policy and programme development

122. The immediate goal of most revenue bodies is to reduce or shift demand to ensure the most effective use of resources and reduce expenditures. However, private sector experience has suggested the opportunity for “the voice of the client”, as identified through demand management, to influence future policy and programme development. With this in mind, it is suggested that further consideration should be given to outlining a process that would ensure feedback and linkage between a revenue body’s demand management data and those areas responsible for future policy and programme development.

VI. KEY FINDINGS AND RECOMMENDATIONS

123. This note has provided a description of revenue bodies' service delivery models and strategies, the methodologies and technologies being used to measure and analyse service demand, the efforts being taken to determine the drivers and root causes of demand and the strategies being used in their day-to-day operations to reduce, shift and better manage this demand. It has also provided a brief description of the service and demand management approaches being used by a selection of private sector organisations. It is apparent that there are a variety of approaches being used by the public and private sector, with a number of common benefits and challenges.

124. The key findings arising from this work are as follows:

- Despite having implemented multi-channel service models and setting service objectives to migrate taxpayers to self-service and their online channel, many revenue bodies are continuing to experience very high demand on their more expensive in-person and in-bound call channels; ***drawing on the data presented there appears to be opportunities for many revenue bodies to harness substantial efficiencies by focusing on analysing the root causes of demand on these channels with a view to developing demand management strategies that will eliminate, reduce or shift the demand to more cost-effective service options.***
- Most revenue bodies are measuring demand through a variety of methodologies and technologies such as manual processes, call centre and workload control systems and databases that provide useful information regarding volumes, trends and topics of demand. Revenue bodies should immediately use this information to develop strategies to improve the management of demand within the various channels to reduce costs and enhance service levels. A number of such strategies, for example staffing to demand, inclusion of information and transactions in a self-serve environment, and reducing the impact of revenue body outputs are outlined in this paper.
- The demand management methodologies currently being used by revenue bodies are typically costly, time-consuming, labour intensive and most importantly not effective for determining the root causes of service demand; ***revenue bodies need to invest in methodologies and technologies that will assist them in efficiently understanding what is causing taxpayers to seek the services of revenue bodies.***
- Once the causes of demand have been identified, revenue bodies should focus on developing strategies to reduce or eliminate this demand; it is only by using such strategies that they will achieve their goals of reducing taxpayers' compliance burden and their administrative costs and increasing the take-up of their online services.
- To reduce demand it is necessary to effect change throughout the enterprise, specifically in those areas where the major root causes exist; ***while most revenue bodies reported having performance management structures in place, greater attention needs to be given by revenue bodies to implementing specific governance structures that will oversee and ensure accountability to effect action plans to address root causes of demand.***

Recommendations

- Revenue bodies are encouraged to evaluate their current situation with regard to the use of their service channels to determine where demand management efforts should be directed to improve service and use revenue body resources more effectively.

- Revenue bodies are strongly encouraged to study and consider implementing the various demand management strategies and tactics outlined in this report to reduce, shift and better manage demand in-channel.
- Revenue bodies are encouraged to consider investing in technologies and methodologies such as those currently being deployed by a few revenue bodies and the private sector that will assist them in determining the root causes of their demand.
- Revenue bodies are encouraged to study the private sector findings in this report related to the governance required to effect change and reduce the causes of demand on an enterprise-wide basis.

Annex 1. Notes to Table 2: Number of service contacts by country

Australia	<p>This information is as published in the ATO Annual Reports. It excludes complaints and ministerial correspondence. The figures are based on client contact services (demand) delivered, and do not include demand not met.</p> <p>For the Australian community to fulfil their taxation obligations mandatory lodgment of data and appropriate payment of any tax due is required. Many of these lodgment requirements are covered by our service standards. We have 27 service standards which represents our commitment to the community about the level of service they can expect from us. To meet these challenges we increase our service standards for electronic dealings with us but reduce levels for paper dealings. Details of the past three year service standards including volume and measurement are included in the following attachment. (Attachment has been included under Additional Information)</p>																																					
Austria	In-Person estimated figures (115/day/tax office), paper no specific papers available)																																					
Belgium	<table border="1" data-bbox="384 730 1278 1043"> <thead> <tr> <th></th> <th>2008</th> <th>2009</th> <th>2010</th> <th></th> </tr> </thead> <tbody> <tr> <td>In-person</td> <td></td> <td></td> <td>146,508</td> <td>(*)</td> </tr> <tr> <td>Inbound calls</td> <td>686, 383</td> <td>988,974</td> <td>1,006,225</td> <td>(**)</td> </tr> <tr> <td>Paper</td> <td rowspan="2">25,295</td> <td rowspan="2">18,090</td> <td rowspan="2">13,954</td> <td>(**)</td> </tr> <tr> <td>Email</td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="5">(*) Infocentre in Brussels</td> </tr> <tr> <td colspan="5">(**) Contact Centre</td> </tr> </tbody> </table>		2008	2009	2010		In-person			146,508	(*)	Inbound calls	686, 383	988,974	1,006,225	(**)	Paper	25,295	18,090	13,954	(**)	Email		Other					(*) Infocentre in Brussels					(**) Contact Centre				
	2008	2009	2010																																			
In-person			146,508	(*)																																		
Inbound calls	686, 383	988,974	1,006,225	(**)																																		
Paper	25,295	18,090	13,954	(**)																																		
Email																																						
Other																																						
(*) Infocentre in Brussels																																						
(**) Contact Centre																																						
Chile	For SII, the web is a complete communication channel with the taxpayer, which contains the contact information, FAQs, help guides and proposed statements. This channel has 155 million visitors per year which represent more than 3 million transactions. We also have web sites for foreign investors and taxpayers of the micro and small business segment.																																					
Estonia	<p>1) In-person: Calculation of contacts for in-person starts from quarter four of 2008.</p> <p>2) Paper: Paper is used as a channel but no exact numbers are available.</p> <p>3) E-mail: This volume only shows the number of e-mails received through secured service channel where the clients can be identified; there is no count of all other e-mails sent.</p>																																					
Finland	<p>1) In-person not measured systematically, data collected when needed from the largest tax offices. The behavior of customers vary greatly depending on the area.</p> <p>2) Inbound calls: Include main call centre (2 million) and area call centres (1.5-2 million.) and direct calls to officials</p> <p>3) Paper includes post that is port payé by Finnish Tax Administration + posted from Tax Administration.</p> <p>4) Other includes contacts made by customers via web-site "vero.fi (questions, feedback).</p> <p>5) Number of customers year 2011 approx. 5.6 million (private+ business)</p>																																					
France	As for e-mail, only general questions asked via web forms are counted. This does not include standard e-mail used by taxpayers to contact directly their local tax service.																																					
Japan	<p>1) In-person: Includes (a) Number of consultations on tax return etc. during the filing period; and b) Number of taxpayers who received guidance on bookkeeping at their request.</p> <p>2) Inbound calls: Number of consultations dealt by Phone Consultation Centers</p> <p>3) Paper: Number of Advance Inquiries to which taxpayers requested written replies</p> <p>* These numbers are based on Fiscal Year (e.g. FY2010 : April 2010 to March 2011)</p> <p>* NTA does not conduct tax consultations via e-mail because it is necessary to know the situation of taxpayer in detail. (However, NTA receives taxpayers' opinions and requests for the improvement of tax administration etc. via e-mail on the NTA website, which is one of public hearing system in NTA.)</p>																																					
New Zealand	<p>*Please note: from 2010/11 some registrations and IRD number applications have been excluded from correspondence figure so it is not directly comparable with previous years</p> <p>**Counter enquiry volumes includes all face to face enquiries; appointments and reception</p> <p>***Electronic correspondence includes e-mail, web/internet and e-file (agents)</p>																																					

	correspondence																																																														
Singapore	(1) Figures include a small percentage of service contacts that resulted from queries initiated by IRAS as we are unable to segregate them from the unsolicited requests for information. (2) Our Financial Year (FY) is from April to March of the following year.																																																														
Spain	<p>Inbound calls (Call-Centre). We consider the calls received in our call-centre n° 1 see above- figures in millions.</p> <p>In-Person: We have the data of the request for general information using our system of previous appointment. This figures are the ones referred to general information queries, but most of the times, the information is join by a service action, so we have added into brackets the total contacts figure.</p> <p>Paper: (NON-PERSONALISED WRITTEN INFORMATION)</p> <table border="1"> <tr> <td>Informative letters</td> <td>49,077,114</td> <td>50,467,442</td> <td>58,427,479</td> </tr> <tr> <td>Practical manuals</td> <td>382,500</td> <td>338,500</td> <td>285,000</td> </tr> <tr> <td>Informative publications</td> <td>17,048,000</td> <td>60,500*</td> <td>60,500*</td> </tr> </table> <p>*All information pamphlets have been made available on the Internet</p> <p>E-mail in: We do not use this channel, but we have studied the possibility of use it to provide non personal information</p> <p>Other. Internet. The AEAT Web page offers access to “INFORMA”, a database of frequently asked questions and answers which can be consulted online</p>			Informative letters	49,077,114	50,467,442	58,427,479	Practical manuals	382,500	338,500	285,000	Informative publications	17,048,000	60,500*	60,500*																																																
Informative letters	49,077,114	50,467,442	58,427,479																																																												
Practical manuals	382,500	338,500	285,000																																																												
Informative publications	17,048,000	60,500*	60,500*																																																												
Sweden	We do have paper as a channel but we do not have any exact numbers.																																																														
Turkey	*Number of in-person contacts is included only contacts of service points, which serve in/out of tax offices to provide information and help to taxpayers in filing period in March. ** Number of paper is included applications by ruling system, which introduced in 2010.																																																														
United Kingdom	<p>HMRC does not differentiate phone or in-person contact between solicited and unsolicited, and the above numbers therefore represent both.</p> <p>Paper volumes represent customer correspondence into HMRC’s main processing directorate (where it is trialling demand management processes). They do not include tax returns.</p> <p>All of the above figures represent the volumes of contact in the key customer service areas of the department, where demand management processes are being run or trialled. As such, whilst they represent an overwhelming majority of HMRC customer contact, they do not represent the volumes in their entirety.</p>																																																														
USA	<table border="1"> <thead> <tr> <th></th> <th>2008</th> <th>2009</th> <th>2010</th> </tr> </thead> <tbody> <tr> <td>Inbound calls (Call-Center)*</td> <td>214M</td> <td>138M</td> <td>140M</td> </tr> <tr> <td>Inbound calls (Answered)*</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Assistor</td> <td>50.2M</td> <td>49.2M</td> <td>47.4M</td> </tr> <tr> <td> Automation</td> <td>53.1M</td> <td>28.9M</td> <td>35.3M</td> </tr> </tbody> </table> <p>* This may include calls that are in response to information requests since we can not differentiate. Appendix B: Details IRS Web Services</p> <table border="1"> <thead> <tr> <th></th> <th>FY08</th> <th>FY09</th> <th>FY10</th> </tr> </thead> <tbody> <tr> <td>Total Web Services</td> <td>83,362,588</td> <td>118,699,358</td> <td>80,676,197</td> </tr> <tr> <td>Internet Refund Fact of Filing (IRFOF)</td> <td>39,205,800</td> <td>54,349,099</td> <td>66,887,207</td> </tr> <tr> <td>Internet Refund Economic Stimulus Plan (IRESP)</td> <td>38,721,387</td> <td>2,099,398</td> <td>0</td> </tr> <tr> <td>Internet Refund Rebate Recovery Credit (IRRRC)</td> <td></td> <td>56,015,561</td> <td>861,776</td> </tr> <tr> <td>Modernised Internet Employer Identification Number (MOD-EIN)</td> <td>2,844,934</td> <td>2,819,119</td> <td>3,105,225</td> </tr> <tr> <td>Disclosure Authorisation</td> <td>121,519</td> <td>169,143</td> <td>224,114</td> </tr> <tr> <td>Transcript Delivery System</td> <td>2,430,263</td> <td>3,205,178</td> <td>3,938,923</td> </tr> <tr> <td>Preparer Taxpayer Identification Number (P-TIN)</td> <td>38,685</td> <td>41,860</td> <td>45,597</td> </tr> <tr> <td>Electronic Filing Pin (E-file PIN)</td> <td></td> <td></td> <td>5,613,355</td> </tr> </tbody> </table>				2008	2009	2010	Inbound calls (Call-Center)*	214M	138M	140M	Inbound calls (Answered)*				Assistor	50.2M	49.2M	47.4M	Automation	53.1M	28.9M	35.3M		FY08	FY09	FY10	Total Web Services	83,362,588	118,699,358	80,676,197	Internet Refund Fact of Filing (IRFOF)	39,205,800	54,349,099	66,887,207	Internet Refund Economic Stimulus Plan (IRESP)	38,721,387	2,099,398	0	Internet Refund Rebate Recovery Credit (IRRRC)		56,015,561	861,776	Modernised Internet Employer Identification Number (MOD-EIN)	2,844,934	2,819,119	3,105,225	Disclosure Authorisation	121,519	169,143	224,114	Transcript Delivery System	2,430,263	3,205,178	3,938,923	Preparer Taxpayer Identification Number (P-TIN)	38,685	41,860	45,597	Electronic Filing Pin (E-file PIN)			5,613,355
	2008	2009	2010																																																												
Inbound calls (Call-Center)*	214M	138M	140M																																																												
Inbound calls (Answered)*																																																															
Assistor	50.2M	49.2M	47.4M																																																												
Automation	53.1M	28.9M	35.3M																																																												
	FY08	FY09	FY10																																																												
Total Web Services	83,362,588	118,699,358	80,676,197																																																												
Internet Refund Fact of Filing (IRFOF)	39,205,800	54,349,099	66,887,207																																																												
Internet Refund Economic Stimulus Plan (IRESP)	38,721,387	2,099,398	0																																																												
Internet Refund Rebate Recovery Credit (IRRRC)		56,015,561	861,776																																																												
Modernised Internet Employer Identification Number (MOD-EIN)	2,844,934	2,819,119	3,105,225																																																												
Disclosure Authorisation	121,519	169,143	224,114																																																												
Transcript Delivery System	2,430,263	3,205,178	3,938,923																																																												
Preparer Taxpayer Identification Number (P-TIN)	38,685	41,860	45,597																																																												
Electronic Filing Pin (E-file PIN)			5,613,355																																																												

Annex 2. Private sector examples—managing client service demand

Canada Private Sector Demand Management Example – #1

Question	Response
1. Please identify the industry of the organisation	Financial Institution
2. Tell us the service model of the organisation.	The service model for this financial institution is to use all channels, however, their strategy is to migrate clients to the self-service online channel.
3. What methodologies and technologies are in place to measure demand and determine drivers and root causes?	<p>One of the main technologies in place at this financial institution to measure demand and determine drivers and root causes is voice analytics. The financial institution takes a sample of approximately 25% of their calls and records these calls. Voice analytics software is used to analyse the reason contacts are being made. The analysis looks at all aspects of the contact such as the topic, the background, any history, the emotions expressed, etc. (Middle and senior managers are expected to listen to the calls to gain an appreciation of the customer experience.)</p> <p>Once the raw analytics work is done it is reviewed by a committee comprised of middle and senior management.</p>
4. What methodologies and technologies are in place to manage demand?	<p>The committee identified above that is responsible for reviewing the results of the voice analysis of the calls is supported by consultants versed in the methodology which analyses the data to get at the drivers of the contact, prioritising which specific irritants should be actioned and developing action plans for the enterprise as a whole to take.</p> <p>The corrective action usually involves areas external to the front end service providers- usually involving changes to core processes. The proposals for action plans are submitted to and approved by the most senior levels in the organisation. The reviewing committee monitors progress against the action plans which is reported to the senior levels.</p> <p>In other words the analysis completed is for the complete organisation and the governance structure involves a cross section of the organisation both for execution and monitoring.</p>
5. Is there an example of a time when methodologies and/or technologies helped manage the demand? What were the lessons learned?	<p>Sometimes changes made by operational areas within an organisation can cause unanticipated call demand for the call centre. The following is an example shared with us.</p> <p>Changes to the way interest was to be calculated on outstanding balances were made and communicated to customers on the back of their credit card statements. The explanation was authored by the legal department. Unfortunately the language used was complex and not easily understood by their customers. The call centre experienced an increase in call demand and a great deal of complaints regarding the interest calculation changes. When customers asked for an explanation of how the interest charges had been calculated the call centre agents would direct the customer to the back of their credit card statement for the explanation.</p> <p>The financial institution used their speech analytics capabilities to isolate the credit card interest problem as the principle reason for an increase in call demand that the call centres was experiencing.</p> <p>Based on a review of some of the conversations it was determined that the language used on the statement to explain the calculation of interest charges was full of legal jargon that was not understandable</p>

	<p>by the average customer. This appeared to be the main irritant which was causing an increase in complaints and calls to the call centre.</p> <p>Volumetric information obtained through the speech analytics software was shared with both the marketing and legal departments to provide them with information on the cause of the increase in demand. Sample recordings were also played so that executives could better understand the customer experience. As a result of this information being provided changes were eventually made which assisted in reducing the volume of calls and the volume of complaints.</p> <p>One of the lessons learned through this experience by this particular financial institution was that a proper governance structure is required in order to obtain the necessary buy-in. Analysing voice records to determine why customers are calling is relatively straightforward. The difficulty is in actioning what you find. To this end this particular organisation has an executive committee made up of department heads that meet each quarter to discuss the top three trends in call demand. Problems are assigned and solutions discussed at these meetings. These meetings are chaired by an outside consultant who is responsible for reviewing the voice recordings using the speech analytics software and presenting the results to the executives for discussion and resolution. The use of an outside third party is to remove any bias that might exist if this function was provided internally.</p>
--	--

Canada Private Sector Demand Management Example – #2

Question	Response
1. Please identify the industry of the organisation	Telecommunications Industry
2. Tell us the service model of the organisation.	<p>This organisation is Canada’s largest communications company, providing consumers with solutions to all their communications needs, including telephone services, wireless communications, high-speed Internet, digital television and voice over IP.</p> <p>The primary goal of the organisation is to be recognised by customers as Canada’s leading telecommunications company.</p>
3. What methodologies and technologies are in place to measure demand, determine drivers, and root causes?	<p>Voice analytics software is used to analyse the reason contacts are being made. The analysis looks at all aspects of the contact such as the topic, the background, any history, the emotions expressed, etc.</p> <p>The goal is to know why the call arrived in the first place. What contributed to the call?</p>
4. What methodologies and technologies are in place to manage demand?	<p>A number of actions are taken to manage demand and improve the customer experience including:</p> <ul style="list-style-type: none"> • Doing more with the customer interactions • Assessing root cause as the “why customers call” • Determining “value add” vs. “non-value” process • Engaging other parts of the organisation • Driving the Voice of the Customer • Reducing the “right calls”
5. Is there an example of a time when methodologies and/or technologies helped manage the demand? What were the lessons learned?	<p>The company introduced a new service to its wireless users that would allow free calling between five friends for a monthly fee. Customers could change their friends at any time by simply calling the call centre.</p> <p>Not long after introducing this particular new service the cell phone provider’s call centre started receiving very high unanticipated call</p>

	<p>demand. Analysing records with the use of speech analytics software revealed that the cause of the increase in call demand was directly related to the new service. The cell provider had under estimated the number of change requests that would be generated by users of the new service. The records also provided information on the type of customers that were using this service. The majority of the customers using the new service were teens who change friends on a continual basis which lead to a huge number of change requests to the call centre.</p> <p>As a result of the information provided the company was able to quickly introduce an online application so that customers using the five friends service could change their friends themselves without having to call the call centre.</p> <p>Given the target group was teens who are generally very web savvy this resulted in a significant reduction in these types of calls to the call centre and increased customer satisfaction.</p>
--	--

United States Private Sector Demand Management Example - #1

Question	Response
1. Please identify the industry of the organisation	Government
2. Tell us the service model of the organisation.	The service model for this Government support contractor is to use multiple channels to service demand, but more importantly to make each of the channels in use as efficient as possible in delivering the crucial services of Government.
3. What methodologies and technologies are in place to measure demand and determine drivers and root causes?	<p>Technologies in Place:</p> <p>Cisco ICM – Call Routing Engine (Intelligent Routing)</p> <p>Cisco CVP – IVR – Self Service Application</p> <p>Blue Pumpkin – Forecasting and Scheduling</p> <p>Witness – Call Recording</p> <p>Each of these technologies was carefully selected to ensure customer experience and demand could be carefully managed and measured. The design of call routing algorithms and self-service menus in every step incorporated key data capture points enabling the rapid identification of the root cause of demand shifts based on the point in which the demand increase/decrease was realised. Forecasting and scheduling tools ensure best possible staffing levels to support demand and Call Recording assists in understanding customer inquiries and support issues.</p> <p>This government support contractor operates from a mind-set that measuring demand requires utilisation of many tools within the Contact channel and that a solid integration between these tools is essential to effectively and efficiently respond to fluctuating demand. Data provided by each of the systems enables efficient root cause analysis and the systems themselves allow for the business to make rapid changes to positively affect demand.</p>
4. What methodologies and technologies are in place to manage demand?	First it is important to note that demand drivers and the root causes of demand change frequently. It is not always as simple as identifying a single driver or root cause to all your demand issues. With that in mind, this government support contractor places a significant focus on not only the IT technologies employed to support and scale to fluctuating demand, but also on the business processes, communication channels to the general public, and other areas that influence and create demand. Customer contact channel technologies deployed by this government support contractor were selected to provide precise routing capabilities that enable a technical extension of the government business and streamline

	<p>services to the general public (including automated self-service applications). Additionally, these technologies were selected for their robust data capabilities, thereby establishing an organisational ability to easily and quickly identify demand shifts and execute root cause analysis for these shifts.</p> <p>In many organisations a fundamental disconnect exists between “IT” and the “Business”. Disconnects of this nature often times lead to poor organisational decisions that in and of themselves drive demand that can be avoided through a more collaborative effort. By deploying technologies that were carefully selected to meet the needs of the government entity, aligning business and IT objectives through collaboration and ensuring technology is programmed to move customers efficiently through the environment, this government contractor has been able to positively affect and manage demand.</p> <p>Technologies in Place: Cisco ICM – Call Routing Engine (Intelligent Routing) Cisco CVP – IVR – Self Service Application Blue Pumpkin – Forecasting and Scheduling Witness – Call Recording</p> <p>Seamless integration and maximised utilisation of each of these technologies is critical to successfully managing demand and ensuring customer service.</p>
<p>5. Is there an example of a time when methodologies and/or technologies helped manage the demand? What were the lessons learned?</p>	<p>The “Technologies in Place” mentioned in #3 and #4 above and the collaborative methodology of bringing “IT” and the “Business” together, also mentioned above, were wholesale changes made at a time when the Government support contractor was asked to improve the organisations level of service to its’ customers. Short term, mid-term and long-term objectives were established, setting a road map for implementation and positioning the organisation for future growth. Short-term objectives were quickly accomplished and service levels improved to acceptable levels almost immediately. In stepping through the road map, which included technological and process changes, the organisation was able to effectively implement technologies and processes that significantly improved their ability to manage and respond to shifts in the demand.</p> <p>Key lessons learned through this process were that “IT” and “Business” collaboration are essential to an efficient operation. When it comes to customer contact channels, the “IT” component is merely a technical extension of the business objective. Without collaboration, the technical execution of fuzzy business objectives can create demand that could have been avoided. Additionally, the right mix of technologies programmed to work efficiently and in the right way together can have a dramatic and positive affect on demand and your ability to manage it.</p>

Australia Private Sector Demand Management Example # 1

<p>1. Please identify the Industry the organisation is in: i.e. Telecommunications, Government, Sales, Insurance, etc.</p>	<p>Banking, Finance, and Insurance</p>
<p>2. Tell us the service model of the organisation.</p>	<p>Consists of a Branch (front office), Call Centre, Online, and Back Office areas</p>
<p>3. What methodologies and technologies are in place</p>	<p>Individual analyses are conducted across each channel of contact (all of the above). Data is compiled to a whole of customer view, with</p>

<p>to measure demand and determine drivers and root causes?</p>	<p>analysis of groups/segments with high volumes of contact. Call monitoring, customer satisfaction and focus groups, continuous improvement/LEAN, and quality assurance are used to identify improvement areas.</p>
<p>4. What methodologies and technologies are in place to manage demand?</p>	<p>Within the Contact Centre, the system records all enquiries, and the majority of unique customers and repeat enquiries are identified through this.</p>
<p>5. Is there an example of a time when methodologies and/or technologies helped manage the demand? What were the lessons learned?</p>	<p>The best example has been in the back office area, where substantial focus has been applied to achievement of processing times. Where previously, turn-around times were based on internally developed service standards measured in days, work processing standards were re-engineered, based on customer expectations. Very substantial internal savings were generated through this approach.</p>