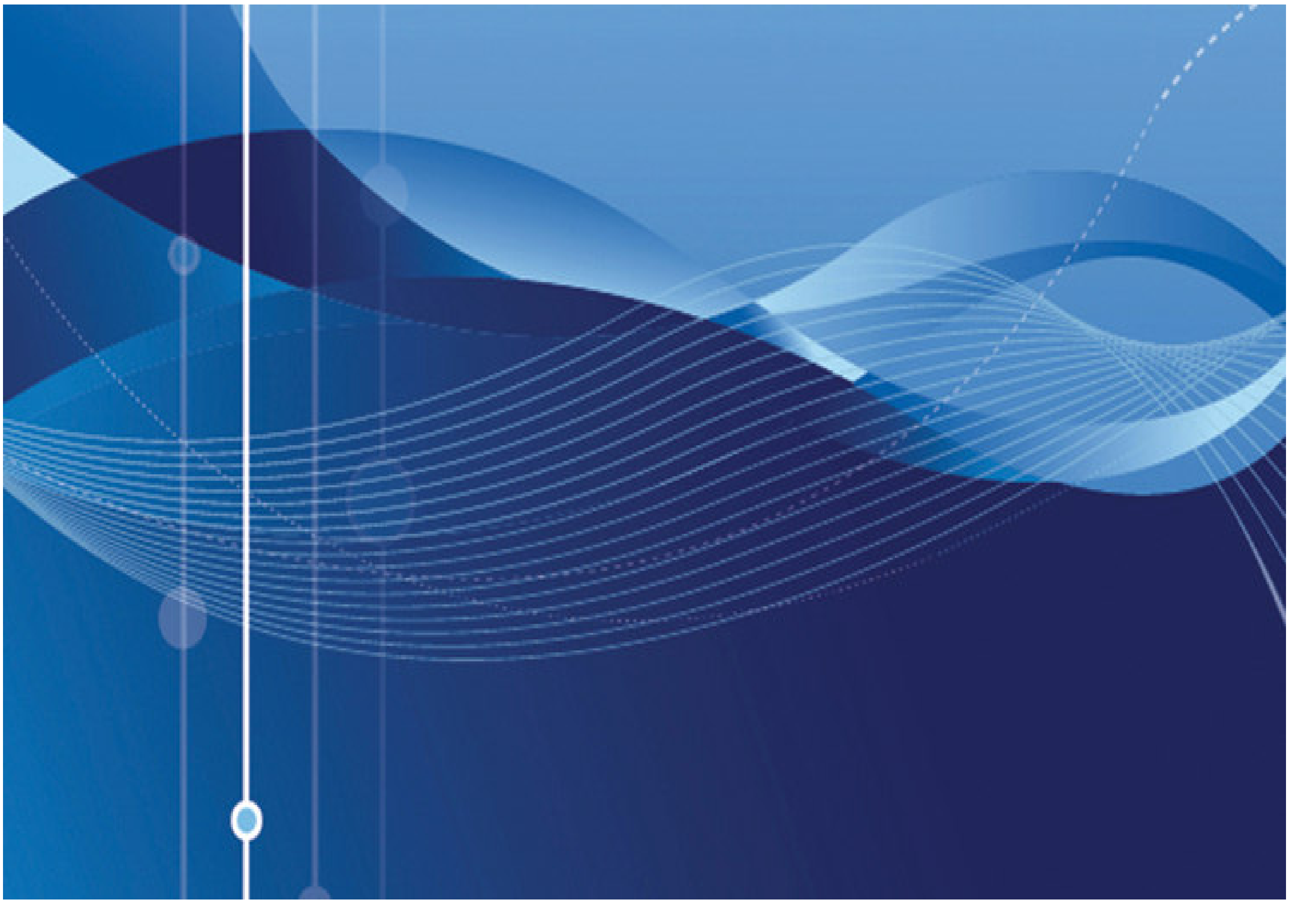

Divisions of General Practice

Information Management Maturity Framework (IMMF)

Toolkit – Staff surveys of awareness and satisfaction with the Division’s IM processes and systems

Information Management Maturity Framework (IMMF)

Toolkit – Staff surveys of awareness and satisfaction with the Division's IM processes and systems

Purpose

The purpose of the "Staff surveys of awareness and satisfaction with the Division's IM processes and systems" tool is to assist Divisions to address the action task below.

Action Task	Capacity Gap	IMMF Element
Implement staff satisfaction surveys for the Division's information management (IM) processes and systems.	Unaware to reactive	User perceptions

1. **This task should have been identified from the Information Management Maturity Framework (IMMF) gap analysis and toolkit specification.**

This tool provides advice for Chief Executive Officers (CEOs) who wish to adopt a standard survey methodology with the survey content varied to meet the subject area, measuring staff awareness and satisfaction with the Division's information management (IM) processes and systems.

Using this tool will assist Division CEOs to establish the extent to which staff are aware of, and are satisfied with the Division's IM processes and systems. This feedback is used to identify trends and highlight IM areas that may benefit from improved IM support or training.

This tool should be used in conjunction with the earlier tool for "Staff IM training and support guidelines", which specifies the range of topics that may be included in the Division's IM training and support material.

Parts of this tool are designed to be re-usable for other survey topics represented by other IMMF tools for:

- Staff surveys of awareness and compliance with IM principles policies and standards;
- Staff surveys of awareness and compliance with the Information Lifecycle; and
- Staff surveys of awareness and compliance with IM legislation and community standards.

Specifically Parts 1 and 4 of this tool are reused in each of the other tools listed above.

Explanatory notes

This tool assists CEOs to gather evidence-based feedback from their staff on the Division's IM systems and processes. It is a not uncommon when dealing with IM awareness and satisfaction that there are significant differences in the experience of senior management and the board of a Division and the rest of the Division's staff.

By developing and using staff surveys a CEO can implement a process to gather direct feedback on the effectiveness of the Division's IM/Information Technology (IT) systems and the IM training and support provided to all staff. This feedback can then be used to initiate PDSA (Plan Do Study Act) cycles for continuous improvement in these areas.

Survey design and the analysis of survey response data are specialist fields and this IMMF tool provides basic information. It is not an alternative to appropriate consultation with experts in these fields when a Division is contemplating a large scale or more complex survey.

The primary sources for this tool were Scheuren, Fritz, What is a Survey?, American Statistical Association and Smart Survey Design – SurveyMonkey.com. A full list of references is cited at the end of the document.

Instructional design

This tool consists of four Parts:

2. **Part 1 – Principles underpinning the use of staff surveys.**
3. **Part 2 – Estimating awareness and satisfaction.**
4. **Part 3 – Survey structure and sample survey questions.**
5. **Part 4 – Survey technology and tools.**
6. Part 1 Principles underpinning the use of staff surveys

This Part presents a brief discussion of survey fundamentals when applied internally within an organisation. It should be used as a general guide for CEOs and their staff to assist them to create survey instruments that generate information adequate for the Divisions' continuous improvement objectives for IM/IT systems and IM training and support.

Part 2 Estimating awareness and satisfaction

Part 2 focuses on survey techniques for estimating levels of awareness and satisfaction from internal staff respondents.

Part 3 Survey structure and sample survey questions

Part 3 provides examples the form of survey and of individual questions and statements of a widely-used method for estimating awareness and satisfaction based on the Likert method.

7. Part 4 Survey technology

Part 4 briefly discusses technology options for conducting surveys.

Summary of outcomes and resources

Workstreams	Outcomes	Resources
New processes or procedures to be adopted	CEOs develop and implement a survey to measure staff awareness and satisfaction with the Division's IM processes and systems.	This tool is designed to be self-administered.
Technology to be developed or acquired	CEOs have an adaptable, paper-based or online survey tool for estimating staff IM awareness, compliance and satisfaction.	
Culture to be influenced	Staff feedback on awareness and satisfaction with the Division's IM systems and processes is used for continuous improvement in IM training and support programs and for improvement in IM/IT systems.	

Part 1: Principles underpinning the survey method

Achieving a sound and consistent approach to creating and using surveys relies on a foundation of four core principles:

1. **The method is the servant, not the master. Survey design is important and so too is survey implementation.**

    1.1. Aim for a balance amongst efficiency, data quality and significance.
    1.2. Decide whether to identify respondents or not; profiling anonymous respondents.
    1.3. Choose the most appropriate approach to the survey.

Staff surveys need to be scaled and delivered in many Divisions to accommodate small numbers of respondents. For a small staff, the IMMF survey could take the form of a few informal questions asked verbally and the responses recorded by the CEO at a one of the regular staff meetings. A more developed approach could take the form of a focus group with an independent and experienced facilitator.

In larger Divisions where staff members may be more difficult to bring together, an email survey or the use of an online survey tool such as SurveyMonkey[1] may be a better choice.

Sensitive issues are best surveyed through anonymous paper-based responses. However, this approach might be impractical in very small Divisions. In some situations, it might be better for Divisions to work collaboratively and cross-survey each other or use the services of an experienced independent focus group facilitator.

If recipients are routinely surveyed, it is a poor practice to ask them to repeatedly re-enter administrative information that remains unchanged over time. Worse still, is to ask a recipient to re-enter the same information in more than one place in the same response. A preferred approach for example, with staff details, is to ask a respondent to nominate their job description but only if there is a difference from previous responses to this information.

Recipients who are to be identified may alternatively be shown what the Division believes to be their administrative data and then be asked to only correct anything that has changed.

2. **Understanding respondent psychology is also important**

2.1. Attitudinal questions have no correct answer and opinions are difficult to validate.
2.2. Attitudes are thought to have:
- cognitive;
- evaluative; and
- behavioural components.

2.3. Avoid trying to influence the result by asking leading questions.
2.4. Avoid asking the respondents to incriminate themselves or their co-workers.

From a CEOs perspective, it is important to remember that an IM management problem may not be a priority for staff and care must be taken to not crystallise the problem by raising its profile in a survey, particularly when the potential solution may be painful.

Similarly, the nature of the issue and how a question is asked has the potential to generate responses that the staff feels the CEO wants to hear. Many survey respondents seek to avoid confrontation and are sparing with bad news, while others seek any opportunity to repeatedly and forcefully express their views.

CEOs should ensure that respondents to staff surveys are informed about what the outcomes of the survey were and what action(s) if any, will result from their investment of time and thought into making a response. Staff who are repeatedly surveyed and who perceive that the exercise is not likely to lead to meaningful change, may be less willing to respond thoughtfully to future surveys.

[1] See website details in the References

3. **It is easy to ask the wrong question** and also easy to ask the right question the wrong way.

3.1. Stand in the shoes of the intended respondent.
3.2. Consider the question wording, style, type and sequence.
3.3. Minimise the survey length and clarify the layout.

Survey respondents often face the daunting task of offering an opinion based on their interpretation of the meaning and weight of comparative adjectives or other expressions of degree such as “significant” or “urgent”. Survey designers should aim for language comprehension levels about those of early high school students, minimising the used of jargon and emotive words. In an example statement below, instead of describing induction training as “good” or “poor”, the term “adequate for me to do my job effectively” helps to avoid different perceptions about what the other relative terms might mean.

A corollary is that the responses should provide information that is actionable from a CEO’s perspective. It is not sufficient, for example, to ask whether respondents are satisfied or dissatisfied about a service and the degree of either. It is better to also find out what aspects drive respondents views of service quality[2].

Pre-testing survey formats and questions or statements is a proven means of ensuring that the survey will be consistently well-understood.

Low response rates are highly correlated with opaque, irrelevant or ambiguous questions and surveys that have even the slightest appearance of being too time consuming to read and complete.

Likewise, response rates will be low if the survey recipients feel that no action will follow, regardless of their responses, suggesting that some surveys will benefit from pre-marketing.

4. **Build in some reality checks.**

Superior surveys build in some checks to expose donkey voting and false responses. The most frequently used technique is to randomise questions and statements and to phrase some in the negative and others in the positive. This forces respondents to read them carefully and to work out that responding in the positive to a positive statement would mean that they need to respond to the same issue presented in the negative through a negative answer.

Responses that are all “very positive” or “very negative” may reflect a poor survey design and / or a worthless response, particularly if two or more statements or questions are contradictory if answered the same way.

[2] See Parasuraman, Zeithaml and Berry in the References.

Part 2: Estimating awareness and satisfaction

Awareness and satisfaction are quite different psychological constructs, demanding different approaches to estimation.

- Awareness – estimated indirectly through indicator topics or self-disclosure.
- Satisfaction – estimated by comparing perceptions with expectations.

Awareness and satisfaction can be estimated by surveys using instruments that are variations on the Likert scale.

Brief discussion of the Likert scale

The Likert scale is probably the most widely-used tool in psychometric surveys. It is characterised by making a statement (not by posing a question) and asking respondents to nominate the extent to which they agree or disagree with the statement by choosing one of the following options, or something similar:

1. Strongly disagree
2. Disagree
3. Neither agree or disagree – or no opinion
4. Agree
5. Strongly agree

Some scales are extended to include a zero which can mean "I do not know – or that this statement is not relevant for me". As it is for the other scores, it is important to define terms at the start of the survey and to be consistent in their use. In other cases, survey designers use a four point scale, dropping out the option for "fence-sitting" (in the above example, 3).

This scale is described as "balanced" since there are equal numbers of negative and positive responses offered. Depending on the nature of the subject of the survey, some designers use an unbalanced scale. For example, a negatively balanced scale on the left and a positively-balanced scale on the right:

1. Very strongly disagree	or	1. Strongly disagree
2. Strongly disagree		2. Disagree
3. Disagree		3. Neither agree nor disagree
4. Neither agree nor disagree / or no opinion		4. Agree
5. Agree		5. Strongly agree
6. Strongly agree		6. Very strongly agree

Working out which issues matter most to a respondent

Some researchers make the assumption that "strongly" shows which issues matter the most to respondents. Another possibly superior approach is to pair statements with a measure of significance. For example:

S1A The training I received when I started work with the Division was adequate for me to do my job effectively.

1 = Strongly disagree; 2 – Disagree; 3 – Agree; 4 - Strongly Agree

S1B Training is the most important issue for me.

1 = Strongly disagree; 2 – Disagree; 3 – Agree; 4 - Strongly Agree

The analysis of responses could be described, for example as *x*% of respondents disagreed that training was adequate for them to do their jobs, but *y*% also disagreed that training was the most important issue, suggesting perhaps that training was not particularly good, but that it was not the most limiting factor in them doing their jobs effectively.

Measuring satisfaction with a service or other intangible subject – another case of paired Likert statements

Although there is some debate about what constitutes customer satisfaction with a service, the dominant model attempts to measure the difference between the expectations customers or clients had before the service event occurred from their perceptions of the quality of the service event itself.

When a respondent feels that their expectations have been met or exceeded, by definition, they rate the quality of service as satisfactory to high. Conversely, when their expectations have not been met, regardless of whether those expectations were reasonable or not, they will judge the quality of the service as marginally unsatisfactory to extremely poor.

A useful approach then is to estimate their expectations first and their perceptions second, and compare the difference. For example:

S2A When a new employee joins an organisation, they should be thoroughly trained to help them do their best work

1 = Strongly disagree; 2 – Disagree; 3 – Agree; 4 - Strongly Agree

S2B I feel that the training I was given when I joined the Division was thorough.

1 = Strongly disagree; 2 – Disagree; 3 – Agree; 4 - Strongly Agree

If someone judged their experience of training as a "4", and said they expected a "3", subtracting the expectation from the perception = +1 suggesting that they were satisfied by their training experience.

Similarly, more positive scores suggest in this case lower expectations, genuinely superior service and / or more easily delighted clients. Conversely, the more negative result suggests room for improvement in the service, better informed expectations, or both.

In a larger sample, one might expect a range of calculated difference scores on a particular issue. The meaning of results clustering around highly positive or highly negative calculated difference is clear.

Many experienced users of paired Likert style of surveys prefer a wider scale such as 1-10, to allow respondents more room to express finer shades of perception and expectation. It is important to define what each band means. For example, it is helpful to illustrate shades of meaning amongst terms like "slightly disagree", "somewhat agree" or "neither disagree nor agree". The meaning of these terms often becomes a subject of debate, but generally they can be thought of as shades of negative and positive response.

There is an alternative view amongst some survey designers that the wider 1-10 Likert scale is problematic because it obliges the recipient to read and understand twice as many definitions of what might constitute a particular score. The 1-10 scale may also disguise the fact that the response is still only subjective, by assuming the wider range of choice leads to more precise answers.

It is recommended for a Division's staff surveys that a simpler scale be chosen:

- 1 – 4 forces a positive or negative response and prevents fence sitting, "I don't know" and "Not relevant for me" responses.
- 1 – 6 allows for balanced and unbalanced response choices (fewer or more negative than positive options) and fence sitting.
- 0 – can be added to denote "Not relevant for me" or "I choose not to respond to this question", or "I don't know".

Looking at the responses

Response rate

Survey response rates fluctuate enormously and depend on many factors both within and outside the control of those conducting the survey. A response rate of 2% of visitors could be considered a good result in an unprompted internet survey. A response rate of less than 90% in a face-to-face verbal survey might be considered to be poor.

Preparation for email-driven, web-based or written surveys is a key factor in boosting response rates. This might entail telephoning the target recipients and securing their co-operation in advance. Timing the survey to minimise its intrusion on respondents and keeping the survey as short as possible also contribute to better response rates.

Bias

Perceptual surveys all face a common problem of the potential for bias through poor selection of the sample of respondents. This can occur through a common phenomenon where only people with an axe to grind bother to respond. Put another way, it's easier to collect complaints than it is to collect complements. Bias is often easy to detect when respondents score all the statements at one extreme or the other, or fence-sit in the middle. When a survey is anonymous, such a biased result makes the response dubious at best and more likely worthless. If many responses are biased in the same negative direction, the issue should be regarded as serious.

Care must be taken in designing the statements in the survey instrument to avoid building bias into the design. Common ways to avoid this are to pose some questions in the negative and to avoid a sequence of statements likely to maintain its own persuasive momentum.

Measuring central tendency and variation – the unavoidable topic - statistics

Using the Likert scale imposes the need for survey analysts to be careful with their choice of statistics for assessing central tendency and variation. Likert scale data dictate the use of non-parametric statistics. Mean or average cannot be used. Instead, central tendency can be expressed as the median or middle score (the score where half of the responses fall above and half below), or the mode (the score being chosen most often). Similarly, in expressing the variation amongst the scores, the standard deviation cannot be used. Variance is meaningfully expressed as the range of scores.

While data are often presented as counts within each category (i.e. number of respondents who chose scores in each of the bands 1-4 for example), they are often represented visually and reduced to percentages on bar graphs or pie charts. Avoid the temptation to compare the percentages in a category of one sample with those in the same category of another sample, particularly if the numbers of respondents are different. Five responses out of ten choosing "4" for example, do not carry the same weight of evidence as 5,000 out of 10,000.

Missing data

Missing data tell their own story too. If respondents consistently omit a response to surveys, or a particular question in a survey, it suggests that the whole survey or a specific question was either ambiguous, irrelevant or perceived as a sensitive matter or an invasion of privacy. Offering respondents a "not relevant" or a "don't know" option helps to answer the issue of missing data, and differentiates an accidental omission from a considered deletion.

When a survey is part of a longitudinal study (several surveys over a time period), the pattern of data provided by an individual can permit an estimate of the missing data. For example, a missing data item could be guessed from the mode or median of previous scores.

Part 3: Survey structure and sample survey questions

The following description of a general survey structure is common to all the IMMF survey tools and in its entirety is most appropriately used when the survey recipient numbers are larger, for example more than 50 people or organisations. As such, the structure is most appropriately used for external surveys.

In the case of staff surveys, particularly in smaller Divisions, a less formal approach could be to discuss a single survey document at a routine staff meeting and produce a consensus view with any dissention noted accordingly. The staff should be notified in advance to foster well-considered responses.

In the context of assessing staff awareness and satisfaction with IM and IT processes, procedures and systems, some aspects may reflect a general consensus and others may depend upon individual staff members' skills, prior knowledge and experience and training. More experienced and longer-serving staff members may be in a position to offer guidance to other staff to assist them to reach a well-informed appreciation of a Division's IM and IT processes, procedures and systems.

1. Covering letter (email or phone call)

The covering letter serves to introduce the survey, state to whom it is sent and its purpose. It is good practice to indicate how much time the survey is likely to take to complete (realistically measured by the designer). The letter should also inform the recipient the date by when the survey must be completed and returned. This date should allow sufficient time for follow-ups of laggards and for processing the responses.

It is a good practice to state how the survey responses will be used and if responses are to be anonymous. Alternatively, an undertaking can be provided that responses will be kept confidential, data will be de-identified, statistical information only will be retained and paper responses will be promptly destroyed.

2. Title and respondent's administration details or a notice ensuring anonymity

Allow the respondent to amend details and request that they need only to enter the changes, not re-enter all the information. Allow the recipient to nominate an alternative respondent if that is appropriate.

If the survey response is to be anonymous, it is important to state how this will be achieved. Particularly sensitive matters may be surveyed through a third party acceptable to staff and the CEO. The third party should summarise and de-identify the information.

3. Instructions for respondents

Provide a short description of how the survey recipients are expected to respond to the questions. The scoring of Likert scale questions must be defined and it is useful to provide an example question with a response, typically a crossed or ticked box identifying the example respondent's preferred score (for email or web surveys) and by circling the example respondent's preferred score (for paper-based surveys).

4. Likert scale statements

Limit the number of statements to the minimum number required to establish a respondent's view on the survey topic(s). Surveys should concentrate on the core business issue(s) and the expected contributing factors. However, care must be taken to avoid leading the witness or to prevent the offering of alternative contributing factors by the respondent.

5. Open questions seeking a brief written narrative or qualitative response

Open questions allow respondents to offer alternative perspectives on the survey issues and this can be valuable when the number of responses is too small to draw conclusions from the scores on the quantitative Likert scale statements. When the number of responses is large, qualitative responses to open questions can be classified and counts presented as a percentage of responses offering a particular perspective.

Where large numbers of responses are received, the answers to open questions are difficult to process systematically and time-consuming. They may, however, confirm or deny the validity of preceding quantitative scored statements.

6. A request for any other comments

Allowing respondents an opportunity to raise a matter not canvassed in the survey helps to emphasise the value that is placed on their opinions and also has the potential to widen the focus of the survey to collect unanticipated information.

7. A conclusion, thanking the respondent

This section is intended to make it clear to recipients that the time and effort they have given to make a response is valued and that they are welcome to contact the survey manager or a nominated person with any questions or comments.

8. Return address details including a contact person's details

It is a good practice to provide the return address and the deadline for responses in the covering letter and on the survey itself, preferably at the end of the survey. The aim is to give the respondents sufficient cues to encourage them to complete the response and return it as soon as possible.

In addition, respondents who need assistance should be given the contact details of a person they can call or email to ask questions, seek clarification, or provide other feedback. It is incumbent on the survey manager to ensure that there is always someone available throughout the time before the survey deadline to answer questions and receive feedback. Return phone calls or email responses should be made on the same business day or the morning of next business day at the latest.

Sample survey questions and statements for surveys of awareness and satisfaction with the Division's IM processes and systems.

Q1 = question 1; S1 = statement 1.

1. Awareness

Q1 Please describe what you understand by the term "Information Management"

S1 Information Management is mostly about computers.

(Choose one option)

1 - Strongly disagree; 2 - Disagree; 3 - Agree; 4 - Strongly Agree

S2 I think that my knowledge of Information Management is sufficient for me to do my job effectively.

(Choose one option)

1 - Strongly disagree; 2 - Disagree; 3 - Agree; 4 - Strongly Agree

S3. My ability to decide what information must be kept, how and where to store the information and how to retrieve it efficiently does not impact the work of my colleagues.

(Choose one option)

1 - Strongly disagree; 2 - Disagree; 3 - Agree; 4 - Strongly Agree

Q2 Have you been trained in using this Division's IT systems?

(Choose one option)

1 - No previous training; 2 - One previous training session. 3 - Regular training or support from colleagues

Any comments about training?

S4. I rate my training in the Division's IT systems as adequate for me to do my work.

(Choose one option)

0 - I have not been trained; 1 - Strongly disagree; 2 - Disagree; 3 - Agree; 4 - Strongly Agree

S5 I am aware of my responsibility for taking care in collecting and giving out information so that I protect people's privacy.

(Choose one option)

1 - Strongly disagree; 2 - Disagree; 3 - Slightly disagree; 4 - Agree somewhat; 5 - Agree

S6 I am conscious of the need to make sure that our Division's information technology and the information we store are secure.

(Choose one option)

1 - Strongly disagree; 2 - Disagree; 3 - Slightly disagree; 4 - Agree somewhat; 5 - Agree

S7 I don't know how to make sure that our Division's information technology and the information we store are secure.

(Choose one option)

1 - Strongly disagree; 2 - Disagree; 3 - Slightly disagree; 4 - Agree somewhat; 5 - Agree

2. Satisfaction

Service quality research sheds some light on the measurement of customer or client satisfaction[3] and the dominant paradigm (that satisfaction is perceived to occur when expectations have been met or exceeded) considers satisfaction as being influenced by five key factors:

1. Appearances – do the procedures, the policies and the systems seem right?
2. Reliability – do these things work the consistently every time?
3. Speed – do things happen fast enough to be workable, or slow enough to be sufficiently thorough?
4. Risk – if I do things according to the book, will I place myself, my Division or our clients in an unacceptably risky position?
5. Empathy – do the IM procedures, policy and system operate in harmony with my work, or against it?

Not all these factors may come into play for a particular situation and the factors may generally not be weighted equally in the minds of the survey respondents.

The approach is essentially to discover what each recipient expected, and then what they felt happened and calculate the difference between their expectation and their perception of the situation. Paired Likert scale statements are useful tools.

S8E I believe that information management policy and procedures are an important part of my job at the Division.

(Choose one option)

1 - Strongly disagree; 2 - Disagree; 3 - Slightly disagree; 4 - Agree somewhat; 5 - Agree

S8P I believe that our Division's information management policy and procedures are easy to understand and action and that our IT systems are easy to use.

(Choose one option)

1 - Strongly disagree; 2 - Disagree; 3 - Slightly disagree; 4 - Agree somewhat; 5 - Agree

Do you have any comments about why this is so, or if not, what needs to be done to improve these aspects of information management or IT systems?

S9E I believe that IM and IT systems are an important part of my job at the Division.

(Choose one option)

1 - Strongly disagree; 2 - Disagree; 3 - Slightly disagree; 4 - Agree somewhat; 5 - Agree

S9P I believe that our Division's IM and IT systems provide me with adequate support to do my job.

(Choose one option)

1 - Strongly disagree; 2 - Disagree; 3 - Slightly disagree; 4 - Agree somewhat; 5 - Agree

[3] See Zeithaml, Parasuraman and Berry in the reference section.

Do you have any comments about why this is so, or if not, what needs to be done to improve the reliability of our IT systems?

S10E I believe that users of IT should be supported so they can complete their work on time.

(Choose one option)

1 - Strongly disagree; 2 - Disagree; 3 - Slightly disagree; 4 - Agree somewhat; 5 - Agree

S10P Our Division's IT users are supported so that we can complete our work on time.

(Choose one option)

1 - Strongly disagree; 2 - Disagree; 3 - Slightly disagree; 4 - Agree somewhat; 5 - Agree;

Do you have any comments about the timeliness or quality of IT support?

Part 4: Survey Technology

Both the American Statistical Association and the *SurveyMonkey* web sites (listed in the Reference Section) have precise, clear and thorough discussions of alternative choices for survey technology.

They present information about the pros and cons of survey method choices.

Survey method	Pros	Cons
Formal and informal verbal inquiries	Low cost, efficient with small groups.	More difficult to record and track information and evolving opinion than other survey methods, unsuitable for large numbers of participants.
Focus groups	Provide qualitative information, improve discovery of related issues, establish relative importance and priority amongst issues and potential solutions.	Higher cost, assumes that the people in the focus groups are highly representative of the target population, unsuitable for large numbers of participants and can be biased if not well facilitated.
Paper-based surveys	Improved access to larger samples than focus groups, allow collection of qualitative and quantitative information, suitable for respondents who lack access to electronic communications and face to face methods. Lower labour costs to conduct.	Demand longer timeframes for distribution and collection of surveys, can be costly in stationery and may be less convenient for recipients to reply and have lower response rates as a consequence.
Telephone surveys	Require less time than paper-based survey methods to conduct, inexpensive for small samples and ubiquity of telephones.	Labour intensive and costly to implement for larger samples, may experience difficulty in contacting recipients.
Email-mediated surveys	Fast distribution, low cost for large numbers of recipients.	Uncertain about the status of receipt, reading and responding of the target sample. May have high labour cost in following up non-responders and processing responses. Recipients need email addresses.
Online survey tools	Fast distribution, low cost for large numbers of recipients and lower costs for processing responses through database, statistical and graphical reporting automation and potentially more secure than email.	Recipients need Internet access.

The online survey toolmaker *SurveyMonkey* offers free-trial usage for limited numbers of survey recipients, and by-the-month or unlimited usage for a year at reasonable rates. The product allows for Likert scale questions and provides considerable flexibility in the way the surveys may be configured and managed and the received data processed through spreadsheets with data graphics like Microsoft Excel.

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