

Simple, but effective: Evolving institutional use of email to grow respondent engagement in business surveys

Spurti D'souza, Jodie Kline and Lance Nelson (ABS, Australia)

spurti.m.dsouza@abs.gov.au, jodie.kline@abs.gov.au, lance.nelson@abs.gov.au

Abstract

Natural disasters and the COVID pandemic have dramatically altered the ways Australian businesses operate. This consequently led to the fast-tracked uplift of the Australian Bureau of Statistics' (ABS) data acquisition function. Among the varied and complex changes implemented in response to recent crises, extension of an email engagement strategy is enabling us to maintain and grow our relationships with business survey respondents.

This presentation discusses the challenges and solutions associated with: sourcing accurate email addresses; development of email correspondence; and scheduling dispatches. A series of experiments and live implementations provide evidence that evolution of email use is addressing respondent calls for electronic communications and helping to drive timely response.



SIMPLE, BUT EFFECTIVE:

Evolving institutional use of email to grow respondent engagement in business surveys

Spurti D'souza, spurti.m.dsouza@abs.gov.au

Jodie Kline, jodie.kline@abs.gov.au

Lance Nelson, lance.nelson@abs.gov.au

Paper prepared for

United Nations Economic Commission for Europe

Expert Meeting on Statistical Data Collection

27-30 September 2021

ABSTRACT

Natural disasters and the coronavirus disease 2019 (COVID-19) pandemic have dramatically altered the ways Australian businesses operate. These events triggered the fast-tracked uplift of the Australian Bureau of Statistics' (ABS) data acquisition function. Among the varied and complex changes implemented in response to recent crises, extension of an email engagement strategy is enabling the ABS to maintain and grow our relationships with business survey respondents.

This paper discusses the challenges and solutions associated with sourcing accurate email addresses; development of email correspondence; and scheduling dispatches. A program of experiments and live implementations provide evidence that evolution of email use is addressing respondent calls for electronic communications and helping to drive timely response.

1. INTRODUCTION

The Australian Bureau of Statistics (ABS), Australia's national statistical agency, is an official source of information used to inform important decisions¹. As the Australian data landscape transformed in response to natural disasters and the coronavirus disease 2019 pandemic (COVID-19)², so too did the ABS data acquisition function. Focused effort to increase use of email is one of many changes enabled to improve communication with business respondents, reduce respondent burden and to encourage survey response during these trying times. Rapid, large scale uplift of ABS email communications involved: scrutiny of the source of email addresses; redesign and development of email correspondence; and scheduling of both batched and targeted email dispatches.

Historically the ABS has used email sparingly when corresponding with businesses regarding their survey obligations – paper and telephone approaches have accounted for a majority of respondent contact but have seen steadily reducing rates of return, with increasing volumes of traditional contact methods required to maintain previously met quality targets (i.e. extra mailed reminder letters, more telephone calls). During 2020, enhancing and extending email communications was identified as a simple strategy to engage businesses which were, in the main, experiencing momentous shifts. In the March 2020 quarter, underemployment hit 13.8 per cent, an historic high, and by the June quarter the Gross Domestic Product had dropped by 7 per cent³. Business respondents reported reduced access to their office mail and phone lines, and ABS call centre interviewers found a growing number of unanswered calls and calls being diverted to voicemail. In addition, some priority postal services were suspended, postal mail was occasionally going to unstaffed addresses, and postal deliveries were taking 2-14 days to reach the address. Postal delays resulted in some businesses receiving their survey invitation after the due date printed in the letter itself.

¹ [About | Australian Bureau of Statistics \(abs.gov.au\)](#); [1005.0 - ABS Corporate Plan, 2020-21](#)

² Woolcott, P (2020) Australian Public Service Commissioner keynote - Strategy and Innovation, Australian Public Sector Innovation Show, Online, 10 June

³ [One year of COVID-19: Aussie jobs, business and the economy | Australian Bureau of Statistics \(abs.gov.au\)](#)

With underemployment up, revenue down, and lockdowns forcing work from home, the ABS needed to modify approach and contact practices to maintain relationships with the business community. Feedback from businesses, international practice, and increasing difficulty contacting businesses supported an extension of email use.

Around 75% of ABS business collections now leverage email as part of the data collection strategy. The extension of email use has been coupled with a strong measurement focus where the impacts of the introduction and refinement of email approaches have been measured and results used to inform subsequent work.

In the following sections, challenges and solutions associated with sourcing email addresses, developing email correspondence, and scheduling communications are examined alongside findings from live implementations and experiments.

2. CHALLENGES AND SOLUTIONS

Within a data collection landscape that continues to shift towards greater and more complicated use of email, the ABS data acquisition research and design team (Data Collection and Design Centre) experienced major challenges that required quick and effective solutions. Table 1 summarises the challenges and solutions experienced in surveys of businesses, discussed in Section 2.

Table 1. Challenges and solutions with emailing business respondents

Challenges	Solutions
Sourcing email addresses	Addresses sourced from <ul style="list-style-type: none"> • Previous cycles of the same survey • Related surveys • Register of Australian businesses
Developing email correspondence	<ul style="list-style-type: none"> • Iterative development between design team and the call centre interviewers who provide real-time insight into respondent experiences and feedback • Usability and cognitive testing of new respondent materials
Scheduling of all communications	<ul style="list-style-type: none"> • Experiments • Live implementations and trials • Real-time monitoring to adapt call strategies

2.1 Sourcing email addresses

Finding and evaluating the quality (and therefore the use) of an email address for a selected business is critical to enabling email communications with respondents. The ABS broadly identified four sources of email addresses for use in survey communications:

- (i) A system verified email address, which the respondent themselves have registered as part of their online Survey Account (via www.abs.gov.au/survey);

- (ii) A person verified email address, which the respondent provides to ABS call centre interviewers or in other correspondence to the ABS;
- (iii) The Business Register, the list of businesses registered with the Australian Taxation Office and contact details of the person who registered it. These contact details may be of the accountant or bookkeeper rather than the ideal ABS survey respondent, and they may be external to the business itself (e.g. a contractor). After an extraction of the Business Register is brought within the ABS, it is updated through various processes that check and confirm business details; and
- (iv) A previous survey cycle or a related survey where, based on experience and analysis of overlapping businesses in samples, the respondent contact details of most of the selected businesses are the same.

The use of emails from each source was established through a risk assessment. The associated risk of each source was determined through a risk assessment (likelihood and impact), including security assessment, against a series of risk scenarios. This process labelled each source-scenario combination with a rating of 'low' or 'moderate' (whereby undoubtedly 'high risk' email addresses were discounted before this process began). For example, considering the fourth source outlined above (a previous survey cycle), an analysis in 2020 of contact details in the Quarterly Business Indicators Survey over four cycles found that on average only 12.5% of respondents' contact details change between cycles. This change is deemed small and manageable by operations' staff, and therefore low risk.

In contrast, the third source (Business Register) comprises the contact details of the person who registered the business upon starting it or updated it at some point. This is usually the accountant or bookkeeper who may be an external contractor to the respondents' business. Although this source carries a moderate risk, the ABS cautiously approaches these contacts via calls, and now email, to seek a referral to the correct respondent or best contact person within the business. This is part of exploring all communication options when COVID-19 and other issues have limited the usual communication channels.

In the Survey of Research and Experimental Development 2019-20, the response rate was almost 30 percentage points behind the target with one month remaining in the post due date collection period (follow up period). Many other engagement methods were tried without enough success (e.g. extended the collection period, increased number of outbound calls, prioritised outbound call lists, etc). Following these efforts, the ABS used the Business Register to source email addresses for businesses that had not been successfully contacted (e.g. outbound calls reached old phone numbers or unresponsive voicemails, letters were 'returned to sender'), which accounted for 12% of the live sample. The email informed the recipient of the survey in case they had not received previous correspondence, that it was overdue, attempts at contacting the business, and it politely asked for an inbound call. Of this group of email recipients, 53.16% responded bringing the final

survey response rate to 91.34%⁴⁴. The email provided the ABS with another avenue to reach the correct respondent, obtain their updated contact details and survey response, and reach the target response rate.

The pressures resulting from COVID-19 and natural disasters, along with an ABS priority on reducing respondent burden and improving respondent experience, enabled the ABS to extend its risk appetite and think creatively to meet ABS' objectives.

2.2 Developing email correspondence

ABS survey call-to-action emails usually follow a template. Templates enable the ABS to industrialise the operations associated with loading and dispatching tens of thousands of emails each month. The email content is tailored as much as possible within these constraints. For example, the core email content includes the survey purpose and the importance of the respondent's participation. It also includes links to web pages that provide primary and secondary information for the survey journey. The primary information typically consists of a link to the online Survey Account, as the primary mode of collection for most business surveys is online; the free call phone number for their particular survey; and a link to further instructions (if applicable), such as the web page containing annotated instructions on submitting data files to the ABS for administrative data providers. The secondary information, such as Frequently Asked Questions (FAQs), is provided on each survey's web page (e.g. www.abs.gov.au/qbis for the Quarterly Business Indicators Survey). It enables respondents to self-help which aims to minimise the number of inbound and outbound calls, minimise call handling time, and it provides additional motivational statements to complete the survey that were not included in the emailed or mailed correspondence (e.g. FAQs for niche respondent groups).

When the impacts of COVID-19 were felt, it became clear that the templates needed to be updated more frequently in response to what was happening in the world. Impacts including lockdowns and government support packages for businesses and people out of work were being implemented and updated rapidly. In turn, business survey emails needed to keep pace.

This was best managed through iterative development between the research and development team (Data Collection and Design Centre) and the call centre (Data Delivery Section) interviewers, who provided real-time respondent experiences and feedback. The research team also analysed call log data and response codes selected by the interviewers to summarise the content of their inbound and outbound calls. These teams continue to work on a daily, or at least weekly, basis together to respond to particularly time sensitive surveys, such as the Quarterly Business Indicators Survey.

To strengthen and explain these types of quantitative findings, the ABS uses qualitative research methods to develop and evaluate research projects. Although the current landscape has made it more challenging. For example, fewer businesses are willing and able to participate in qualitative research such as usability or cognitive testing before the new products are implemented. The research and design team have needed to adapt by using a combination of experiments, live trials,

⁴ ABS DCDC Business Team internal research papers. For further information, please contact this paper's authors.

live implementation, and real-time monitoring to inform live adjustments. This is typically followed by qualitative debriefs with the call centre interviewers, in addition to qualitative coding analysis of the respondent feedback documented in the customer relationship management systems. The post-survey qualitative research and evaluation helps maintain a mixed methods research program.

The following sections discuss some key outcomes of the development approach, and the quantifiable impacts on survey participation and data collection operations.

2.3 Scheduling of all communications

To communicate directly with business survey respondents, the ABS employs a combination of letters, emails, outbounds phone calls, and to a lesser extent, short message service (SMS). For online collections where respondents' email addresses and mobile phone numbers are available, the survey invitation (including the call to action) is sent electronically in addition to a mailed letter. The electronic channels provide immediacy, whereas the mailed letter provides legitimacy and formality. A series of reminders are also sent via these channels to nonrespondents. The number of reminders depend on the length of the enumeration and post-due date data collection period (follow up period). Historically, the reminders across all modes contained mostly the same content and layout, each yielding diminishing returns. The research and design team recently developed a work program to gradually enhance these components, beginning with the first reminder email (discussed in Section 2.4).

Another key finding from analysis conducted over a range of business surveys relates to the optimal day of the week to dispatch an email. Call-to-action emails sent on a Tuesday, Wednesday, or Thursday yield greater immediate form submissions and inbound calls than emails sent on a Monday or Friday⁴. The exception to this rule is where a survey (e.g. Survey of Average Weekly Earnings) has a particular type of respondent (e.g. the person who organises payroll) and a particular day (e.g. Friday) aligns better with their availability.

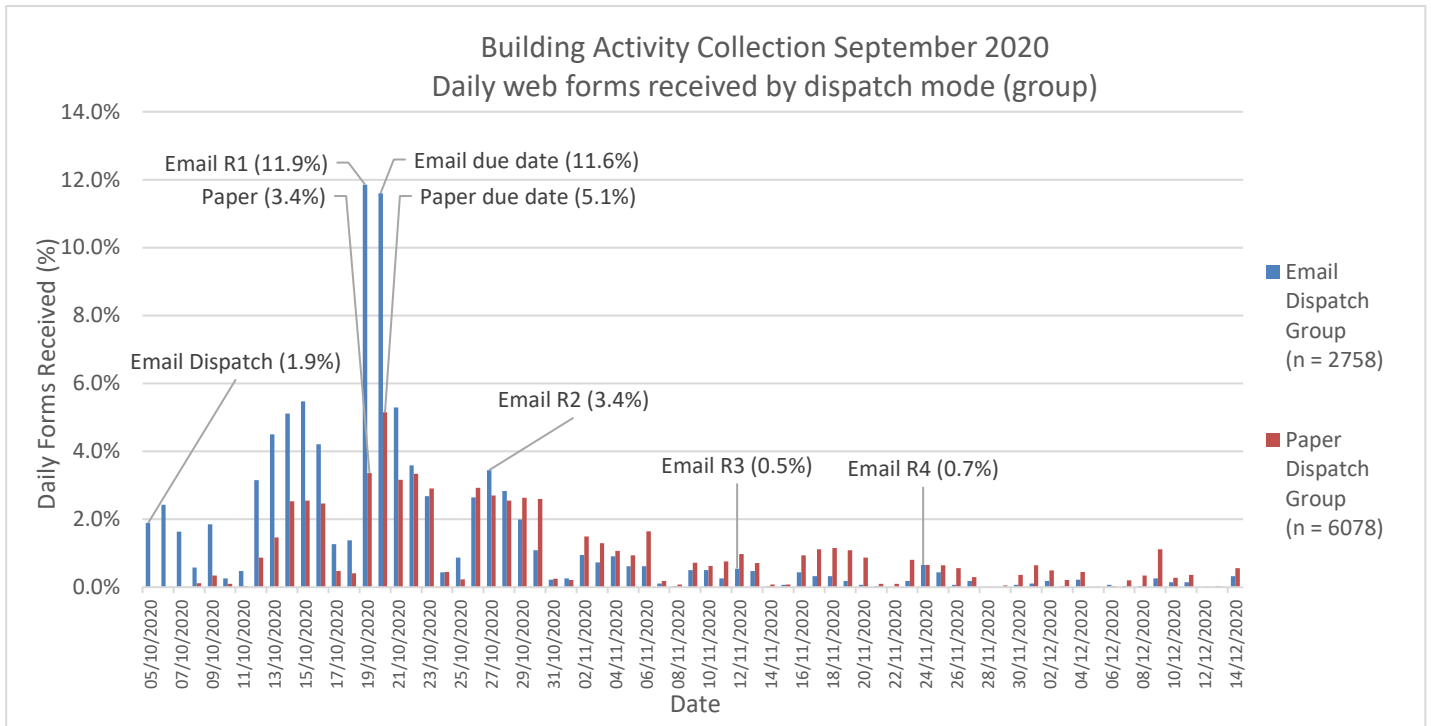
Last, every email generates inbound calls. This is particularly pronounced following the invitation and just-in-time Reminder 1 emails. For example, in the Quarterly Business Indicators Survey June 2021 (with a sample size of approximately 18,000 respondents), the Reminder 1 email sent the day before the due date drew an average 2.65 percentage points of inbound calls greater than June quarters in 2018-2020⁴. Inbound calls save operational time and costs compared to outbound calls as a successful contact is guaranteed, allowing call centre interviewers to discuss or negotiate survey participation or collect data over the phone at a time that is convenient for the respondent. Of note, the magnitude of the spike in workload was unexpected at the time and telephone lines were understaffed. A key learning from this work was that the call centre managers need to be consulted to help inform the email dispatch date and ensure their staff resources are allocated on these dates.

2.4 Just-in-time reminder email

The just-in-time reminder email strategy was first designed and implemented in the quarterly Building Activity Collection September 2020. This innovation was sparked by common respondent feedback across various surveys that respondents intend to submit their survey by the due date, but they 'simply forget'. Multiple Behavioural Insights design principles were applied to optimise the

email content, including the EAST Framework⁵. The email was dispatched the day before the due date, at approximately 3pm. After it was dispatched the bulk of that day’s submissions (11.9%) came through (Chart 1). This strong submission rate continued to the due date, which obtained 11.6% of the submissions from respondents who were sent this email⁴.

Chart 1. Building Activity Collection September 2020, daily web forms received by dispatch mode



Since then, the just-in-time reminder email has been rolled out to numerous ABS business surveys. In each survey and each cycle, a similar positive boost in key metrics is experienced, including online self-response rates and inbound calls. Inbound calls in particular help the ABS update contact details, establish successful contact, and convert the respondent from the phone to web mode. In the annual Business Characteristics Survey 2019-20 (survey content is on business innovation) there was an 11-percentage point boost in online response rates in the 24 hours after this Reminder 1 email was dispatched⁴. This attained a 32% self-response rate as at the due date from the email group. As this email design is gradually adopted in other ABS business surveys it continues to be tweaked and enhanced, but the core content and dispatch methodology have remained constant and consistently effective.

⁴ ABS DCDC Business Team internal research papers. For further information, please contact this paper’s authors.

⁵ The Behavioural Insights Team (2014). EAST: Four simple ways to apply behavioural insights. [BIT-Publication-EAST_FA_WEB.pdf](#)

2.5 Conditional extension

During these trying times businesses understandably need more time to prepare for and submit their ABS surveys, and a significant portion of inbound calls are to request extensions to their due date.

At the same time, the ABS' automated email dispatch systems rely on a respondent entering their Form Access Code in their online Survey Account. The Form Access Code is a unique alphanumeric code that enables access to the respondents' own online survey form via their online Survey Account. It also creates a link between the respondent's Survey Account and ABS systems, which enables monitoring of the respondents' participation status (e.g. not started, started survey, completed survey), and these statuses in turn trigger automated emails to remind nonrespondents.

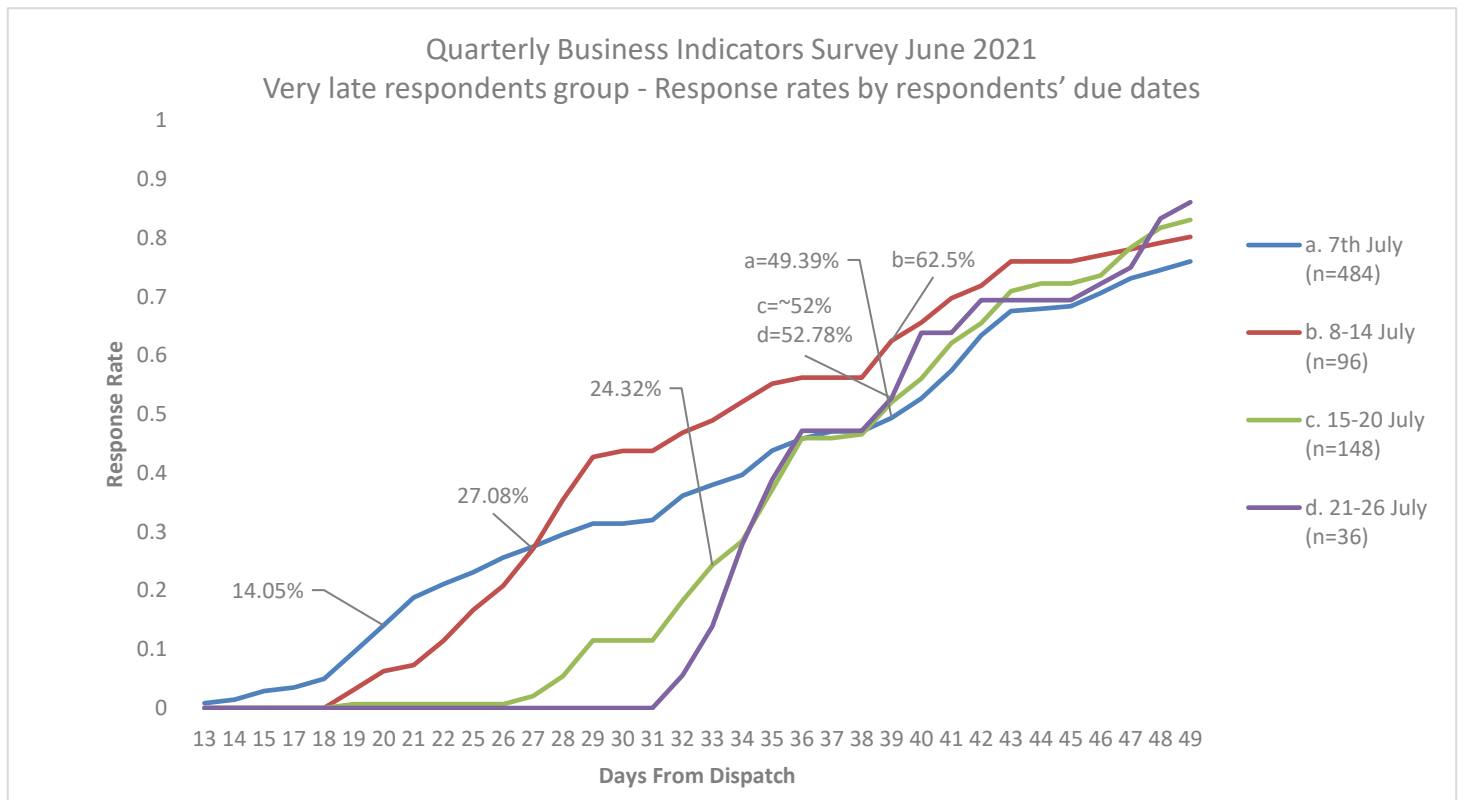
This is critical to, for example, the success of the just-in-time Reminder 1 email (discussed in Section 2.4). To help the ABS balance a lenient due date with timely submission within the ABS operations' data collection window, the research and design team and the call centre team jointly developed a call script to provide respondents with an extended due date upon entering their Form Access Code.

A new script was developed to shift away from providing variable extensions based on respondents' preferences, and move towards providing extensions to consistent dates that align with the automated email reminder strategy. This was trialled in the Quarterly Business Indicators Survey June 2021. This cycle had a particular focus on very late respondents, so this trial was specifically applied to those who had previously responded after the Reminder 3 email was dispatched in three or four out of five of the previous quarters. The part of the call centre interviewers' script that discussed extensions involved granting an extension by particular dates (14 and 20 July) to align with the automated Reminder 2 and 3 email dispatches (on 15 and 22 July respectively). This ensured that respondents who were granted an extension on these dates receive a post-due date reminder email shortly after their extended due date. Most of these businesses had the original due date of the 7 July, followed by the 14 July, and then 20 July.

Of the respondents that did not request an extension (i.e. retained the original due date, 7 July) only 14.05% had responded by their due date (labelled Group a in Chart 2). Whereas with some more time, of the respondents with an extended due date by up to one week (labelled Group b in Chart 2) 27.08% had responded by 14 July. Surprisingly, of the respondents who received an extended due date of up to two weeks from the original due date (20 July), only 24.32% had responded by their due date (labelled Group c in Chart 2). Further analysis is required to explore the types of businesses that were more likely to request and be granted an extension to 14 or 20 July (e.g. based on business size, industry, length of questionnaire). Nevertheless, this indicates that an extra week can yield greater self-response, which supports previous research on this survey⁴. This strategy will gradually be expanded to other respondent groups in upcoming quarters.

⁴ ABS DCDC Business Team internal research papers. For further information, please contact this paper's authors.

Chart 2. Quarterly Business Indicators Survey June 2021, response rates of very late respondents



2.6 Respondents' communication preferences

As part of their online Survey Account, respondents can set their communication preferences. Although most business respondents prefer to receive emails only or emails and letters, some indicate they prefer mailed letters only. Experiences have shown, however, that some respondents indicate they prefer one mode (e.g. letters only) but respond or behave better to a different mode (e.g. email, as it is timelier). In important situations the ABS needs to override the respondent's preference to communicate via a non-preferred mode. For example, COVID-19 impacted respondents' access to their office mailbox, so the ABS overrode communication preferences to send survey invitations and reminders via email. This was explained in the email to mitigate risks:

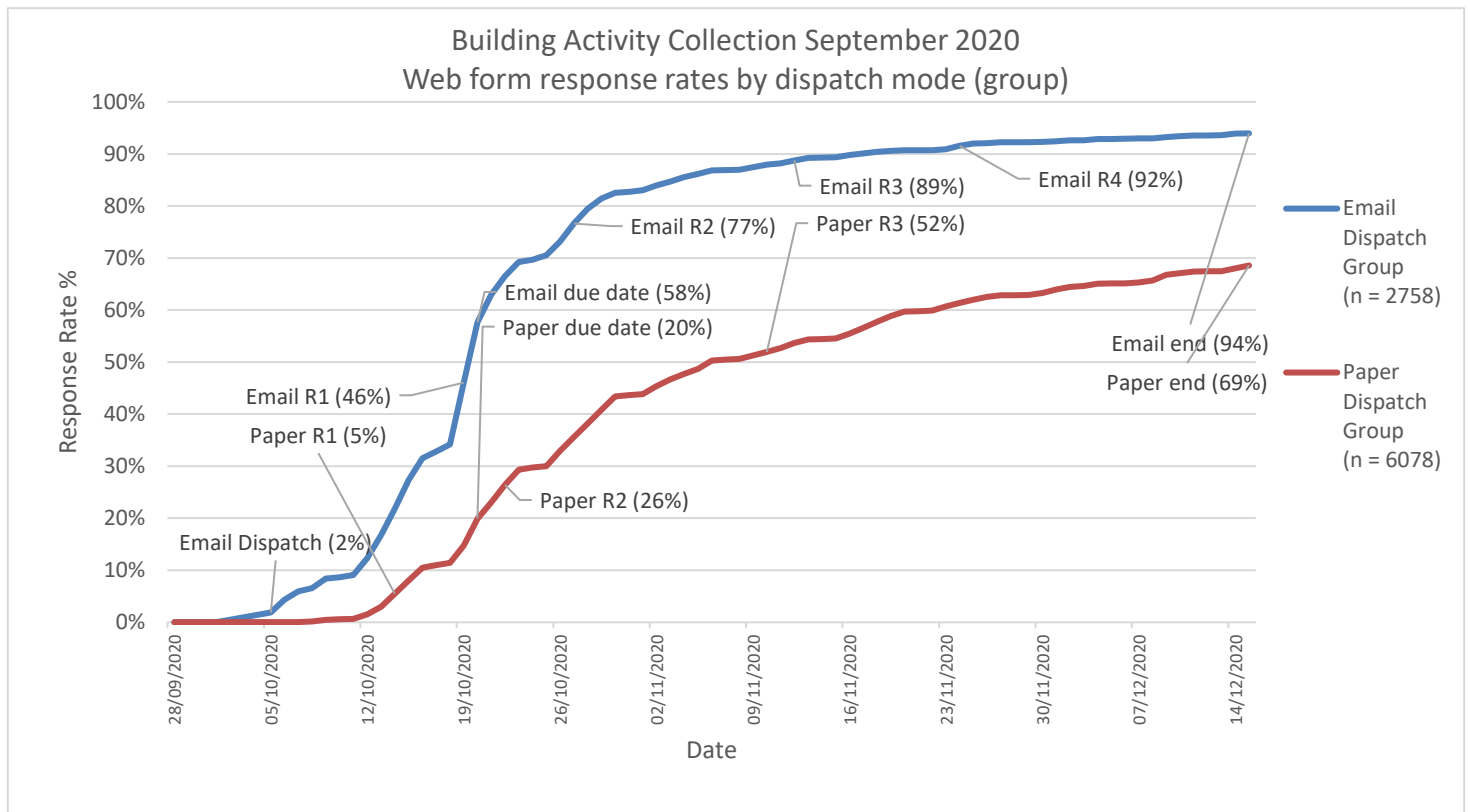
“Please note: you may have received both a letter and an email from us in relation to this survey. We recognise you may not be able to access your mail due to the impacts of coronavirus (COVID-19). Therefore, in order to make contact with you, we are also sending emails to help make the process easier during this difficult time.”

A debrief with the call centre interviewers did not find any respondent complaints with this process or explanation.

3 CONTINUING TO GROW THE USE OF EMAIL

In each survey that has introduced email correspondence, the ABS has observed a factor that increases response rates and maintains a higher response rate throughout the collection period. This positive effect is even seen in treatment groups that receive emails with and without the Form Access Code in the email. The positive ‘email effect’ is experienced in surveys that source email addresses from all the sources outlined in Section 2.1. The email effect could be somewhat explained by the characteristics of businesses for which we have email addresses; or by the immediate nature or succinct content in the email themselves; or other factors. Either way, response rates in the quarterly Building Activity Collection September 2020, for example, illustrate that from the first invitation email (paper-only recipients = 0% vs email recipients = 2%) through to the end of the collection period (paper-only recipients = 69% vs. email recipients = 94%), respondents that received emails started, grew, and maintained a higher response rate than those who received letters only (Chart 3)⁴. This pattern has been observed and proven in numerous other ABS surveys. Therefore, it is in the respondent’s and ABS’ best interests to implement an email correspondence strategy in more business surveys.

Chart 3. ‘Email effect’ observed in Building Activity Collection September 2020



Benefits of invitation and reminder emails noted, all surveys that currently have an email strategy see diminishing returns from the Reminder 2 email onwards. This is partly due to the known

⁴ ABS DCDC Business Team internal research papers. For further information, please contact this paper’s authors.

increasing difficulties with late responders, but it is presumably also due to the email content. Whereby these later reminder emails contain the same or very similar content, and the same or very similar subject lines. Previous ABS experiences show that sending the same content, or visibly indifferent content, to respondents yields very little⁴.

In sum, additional reminders are incrementally beneficial, but we need to continue to research and innovate to use them strategically; optimise the effectiveness of each reminder; and in doing so evaluate the impact on longitudinal panel maintenance as most business surveys rely on a cohort of returning respondents.

Future research and interventions that are being considered include:

- Exploring the ideal way to communicate with a respondent who is in multiple ABS surveys concurrently.
- Trialling a method of sending a paper form via email (e.g. editable PDF) for paper mode surveys, where access to postal mail is limited.
- Research on enhancing the later email communications (e.g. Remainder 2 email that comes after the well performing just-in-time Reminder 1 email).
- Exploring opportunities to extend email communication, such as management of inbound emails. Although the ABS currently manages inbound electronic messages through the Business Surveys Contact form (www.abs.gov.au/bcsf), respondents still request the ability to email the ABS directly it is more convenient and gives them an electronic paper trail.
- Ongoing program of research and iterative testing to finesse the respondent engagement strategy overall.

Although COVID-19, natural disasters, and a priority of reducing respondent burden sparked the rapid developments in this space, the plans for future innovations in expanding and enhancing the ABS' use of email communications with business respondents will continue well beyond the current landscape.

⁴ ABS DCDC Business Team internal research papers. For further information, please contact this paper's authors.