Best Practice Econometrics

Harnessing the power of JICMAIL
to measure the true effects of mail

Introduction

Since JICMAIL's launch in January 2018 it has been steadily building a reputation as an indispensable source of planning insight for the advertising mail industry. Already with 11 quarterly data releases under its belt, 60+ subscribers onboard and over 130,000 mail journeys tracked, there has never been a richer source of mail interaction data on which to both shine a light on the role of mail in the media mix, and to also create more efficient data driven campaigns that have impact throughout the customer journey.

Advertising mail is the third largest medium after TV and digital, worth £1.6bn annually. Prior to the launch of JICMAIL it was the only medium without a media planning currency and

therefore a channel difficult to have consistent conversations about throughout the planning and measurement process.

JICMAIL has something to offer at all stages of the planning cycle: from audience insight to campaign strategy, and from media selection to campaign implementation. For traditional media agencies it has elevated the conversation about mail by speaking in the same audience-based language (the language of reach, frequency and impressions) as that of the planning currencies for other media channels; while for direct mail and integrated agencies, JICMAIL is proving its value by reporting on a far greater suite of effectiveness metrics than are picked up with traditional response tracking.

In the measurement space, econometricians routinely evaluate the entire marketing mix, a task becoming more complex by the day as the number and varieties of digital channels explode. The need to pin down digital has, however, distracted practitioners from developing their approaches to measuring other media. The trigger for development is often the arrival of better information which enables a new perspective on generating a deeper understanding of consumer behaviour. The arrival of JICMAIL therefore offers an ideal opportunity to take a fresh look at how practitioners use econometrics to evaluate the effectiveness of direct mail and door drops.

UK ad spend by media (£M) 2018

Media	Spend
Internet	£11,988m
TV	£5,114m
Mail	£1,555m
Outdoor	£1,209m
National News	£971m
Local News	£804m
Magazines	£718m
Radio	£713m
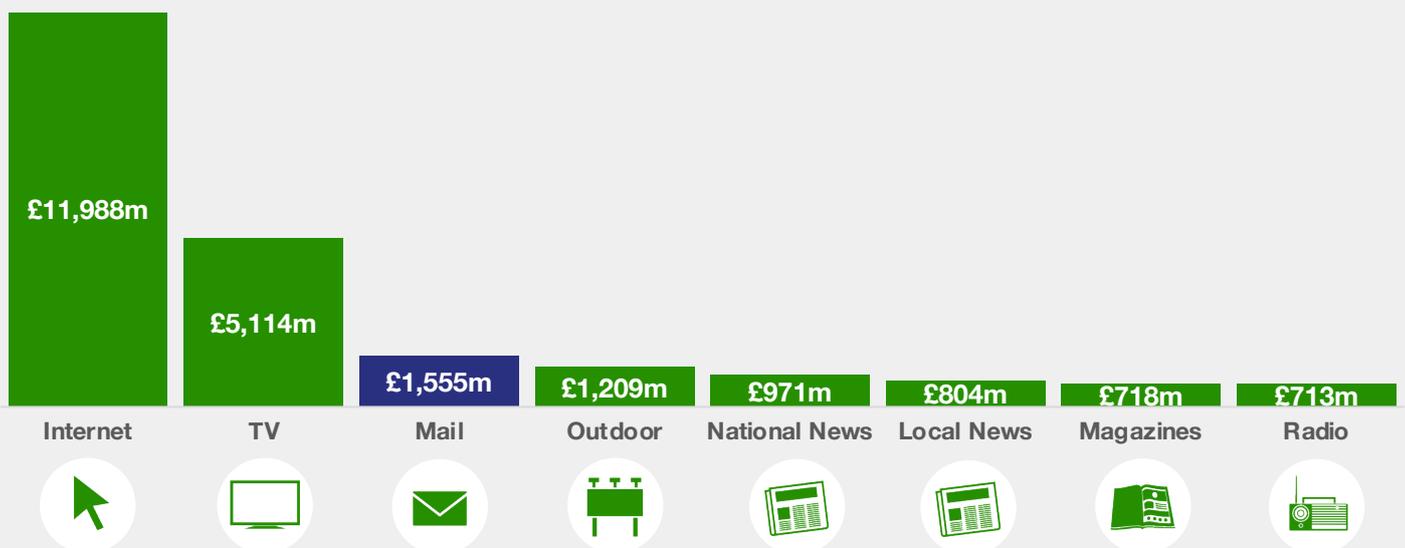
Source: WARC 2018.
The Mail figure above only applies to direct mail and does not include: £2,013bn Business Mail (source: Royal Mail); £258m Door Drops (source: DMA Annual Door Drop Industry Report 2019)

For this whitepaper, advertising mail (ad mail) is defined as a combination of direct mail and door drops. Within this document we will refer to ad mail as 'mail'.

Best Practice Econometrics

Content

The JICMAIL Econometrics Roundtable

In order to unpick some of the key mail behaviours and trends emerging from JICMAIL and discuss how this data should be applied to client econometric models, JICMAIL convened a roundtable of measurement and insight professionals from a cross section of the advertising and communications industry. The challenges of mail measurement, econometric best practice and the role that JICMAIL might play in plugging existing data gaps were all discussed.

The roundtable took place on the 22nd October 2019 and the resulting conversation has informed the contents of the key recommendations presented in this whitepaper.

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Four key themes for the econometric analysis of mail

The complexities of mail measurement were discussed at length over the course of the roundtable session. These challenges have in turn informed four overarching themes, around which specific recommendations can be made in harnessing JICMAIL data to better understand mail effects in econometric models. **JICMAIL now enables practitioners to:**

Convert mail items to ad impressions

For econometricians this offers the ability to:

Convert mail items to reach and impression metrics using JICMAIL gold standard planning data: either via JICMAIL Discovery, or through IPA TouchPoints Channel Planner.	Factor JICMAIL trend data into underlying model assumptions. JICMAIL trend analysis reveals seasonal variation in frequency of mail interaction (and impacts) by industry sector.	Factor differences in mail item to impressions multiplier into underlying model assumptions. The mail item to impressions multiplier varies significantly by audience type.

Specific advantages and challenges outlined in the roundtable

Addresses the current lack of a common planning language for mail for econometric practitioners.	Employing mail impacts would be valuable where there is sufficient data to uncover impact trends over time.	Employing mail impressions would be of value where there are observable differences between audiences.

Analyse mail behaviour to test model assumptions

For econometricians this offers the ability to:

Explore JICMAIL data to cross-check model assumptions relating to a whole raft of mail behaviours: e.g. opening time-lag, interaction rates by day of delivery and the endurance of mail effects throughout the month.	Provide previously unavailable insight into why overarching mail effectiveness trends are observed. JICMAIL allows physical mail interactions and lifespan to be assessed by numerous audience and mail types.	Use JICMAIL data to not only report on direct mail and door drop effectiveness, but also newer innovations in the market such as partially addressed mail, along with 17 different mail content types.

Specific advantages and challenges outlined in the roundtable

Up until now there has been a lack of mail industry data to validate econometric model results of mail.	There is increasing pressure to provide more explanation around model outputs. This information will help to address that.	Increasing pressure to explain differences between mail and mail content types. This information will help to address that.

Measure the full range of mail effects

For econometricians this offers the ability to:

Analyse the 12 different types of commercial outcome in response to mail exposure – many of which do not refer to a direct sale, but speak to effects further up the purchase funnel. These should be analysed by sector, mail, and audience type to enhance model output.	Factor the % of mail driving digital outcomes into model outputs. JICMAIL reports that both direct mail and door drops can have significant impact in driving digital traffic.	Consider the conversion of mail items into impressions to report on the halo effects of mail. Brand campaigns employ the metrics of reach, frequency and impressions as proxies for brand effectiveness.

Specific advantages and challenges outlined in the roundtable

Models generally ignore the wider effects of mail campaign exposure – a perspective now provided by JICMAIL.	'Last-click attribution' is still surprisingly popular – a practice challenged by JICMAIL data.	The brand effect of mail is rarely discussed or acknowledged. JICMAIL data can point towards ways of measuring those brand effects.

Assess brand specific and competitor mail campaigns

For econometricians this offers the ability to:

Use mail data for larger advertisers as JICMAIL contains a raft of brand specific data that can be used to calculate campaign average interaction rates, enhancing model time series inputs accordingly.	Use data pulled from JICMAIL's Mail Item Database to give a detailed view of campaign dates and audiences reached by mail type for the top-tier of mail users whose individual mail campaigns will be picked up by JICMAIL	Analyse the JICMAIL Mail Item Database at the item level to measure campaign performance over time, competitor performance within the same frame, and the overlap of key audiences and households targeted within a given time period.

Specific advantages and challenges outlined in the roundtable

Enhancements that allow practitioners to assess observable differences in mail behaviour over time will benefit model outputs.	Accurate sources of mail volume data relating to who has mailed what and when are surprisingly hard to come by.	There would be considerable value for brands in being able to assess competitive activity.

Key principles for harnessing JICMAIL for econometrics

The recommendations made in this paper must be considered in the context of the complexities and challenges that practitioners face when modelling mail effects:

1. Econometricians operate in a world where there are more unknowns than ever before. When it comes to measuring the effects of media, the fragmentation of media consumption and incompatible measurement systems can sometimes be more of a source of uncertainty than clarity.

2. Mail is not immune to these challenges. The major issue in evaluating mail comes from the wide range of tasks it is applied to. The division between direct mail and door drops adds further complexity. Some mail will probably have short-lived impacts (e.g. timed price offers), while others may produce longer-lived effects of more of a brand-building nature.

3. Mail embodies a particular complexity in that direct mail is addressed to selected (possibly niche) individuals where door drops are a more mass-market medium. This means that the nature of their sales responses may also be different, making a one-size-fits-all approach to measurement risky.

4. The two distinct types of mail and the range of possible sales responses make for a complex task when unpicking individual contributions to the final sales outcome. Correctly interpreting these individual contributions can be difficult. The JICMAIL measurement framework and planning currency provides key insights into how particular types of campaigns are working, enabling better informed and more robust results to emerge.

5. At the start of any evaluation project, practitioners have multiple mail variables to consider. Data sources which provide some certainty in a world of expanding unknowns are vital. JICMAIL in many respects provides a vital source of certainty to an industry which has not traditionally unified itself around a single measurement framework and currency.

The recommendations to follow are by no means exhaustive but are designed to inspire practitioners to think differently about modelling the effect of direct mail and door drops. Every econometric model is unique, and each practitioner will have their own principles that they apply to assuring data rigour. By showing clearly how various types of mail impact consumers, the richness of the JICMAIL data set will enable econometricians to evaluate mail in a more consistent way.

Comparisons with other media can then be more confidently and accurately made, meaning mail will receive its rightful credit.

Converting mail items into ad impressions

"The more times you see or the longer you keep hold of your mail, the more exposure you have to it which should give an indication of interest or likelihood to respond. You could do something with that data."

- Mark Henshall, British Gas

	Challenges Outlined	JICMAIL Recommendation
1	Lack of common language for mail between planners/marketers and econometric practitioners.	Convert mail items to reach and impression metrics using JICMAIL gold standard planning data: either via JICMAIL Discovery, or through IPA TouchPoints Channel Planner.
2	Employing mail impacts rather than mail items in models will only be of value where observable differences are noted between different mail campaigns.	JICMAIL trend analysis reveals seasonal variation in frequency of mail interaction by industry sector. Factor JICMAIL trend data in underlying model assumptions.
3	Employing mail impacts rather than mail items in models will only be of value where there are observable differences between individual mailings.	The mail item to impressions / impacts multiplier varies significantly by audience type. Factor impacts into underlying model assumptions.

Measurement Best Practice

As measurement practitioners, we should be conscious that campaign efficiency does not always equate to campaign effectiveness.
Planning a campaign by optimising on cost only, and ignoring the impact of effective frequency will only contribute to the rise in short termism which currently profoundly effects the industry without delivering clients true ROI.
A common language that allows practitioners to consider reach, frequency and impacts across all media channels on a like-for-like basis is vital if we are to improve the narrative around effective campaign planning and measurement.

Although JICMAIL has been set up primarily to provide planning metrics to help marketers plan more efficient and effective campaigns, it also provides a common language which benefits econometricians. This common campaign language will enable the strategic intentions behind a mail campaign to be shared more effectively and this in turn will enable econometricians to produce results with truly actionable learnings for future campaign plans.

The core building blocks of JICMAIL relate to the media planning metrics of reach, frequency and impressions (or impacts). These are metrics that above-the-line channels have had at their disposal for years, but until the advent of JICMAIL were an unknown quantity in the mail world.

For those familiar with the world of media planning currencies, these calculations will be straightforward:

Item Reach =
average number of people per household who are exposed to a mail item

Audience Reach =
number of mail items x Item Reach

Frequency =
the number of times the average mail item is interacted with over a 28-day period

Impressions =
Audience Reach x Frequency

Converting mail items into ad impressions
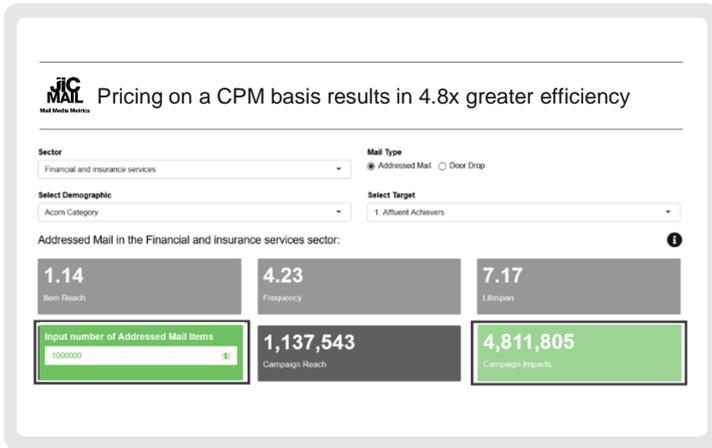
Source JICMAIL Audience Data Q3 2018 to Q2 2019 Financial and Insurance services Addressed Mail. n=2118 Affluent achievers. JICMAIL Item Data Q2 2017 to Q2 2019 n=3,632 charity mail items, n=9,498 retail mail items

As the chart to the left demonstrates (taken from the JICMAIL data portal, JICMAIL Discovery) the conversion of mail items to impacts or impressions produces a very different view on campaign volume and the subsequent number of opportunities to get a brand's messaging in front of consumers.

The item to impression multiplier is calculated as:

$$\frac{4{,}811{,}805 \text{ impressions}}{\div\ 1{,}000{,}000 \text{ items}}$$

x4.8 items/impressions multiple

Table below shows which MOSAIC audiences are most efficiently delivered by DM and door drops (based on item to impression multiplier)

Direct mail		Door drop	
5.2	Urban Cohesion	3.7	Rental Hubs
5.1	Vintage Value	3.2	Vintage Value
5.1	Senior Security	3.2	Senior Security
5.1	Modest Traditions	3.2	Transient Renters
5.0	Family Basics	3.0	Country Living
4.9	Country Living	3.0	Suburban Stability
4.9	Suburban Stability	2.9	Rural Reality
4.7	Rural Reality	2.8	Urban Cohesion
4.6	Rental Hubs	2.8	Municpal Challenge
4.6	Prestige Positions	2.8	Modest Traditions
4.6	Domestic Success	2.8	Prestige Positions
4.4	Municipal Challenge	2.8	Family Basics
4.3	Transient Renters	2.6	Domestic Success
4.2	City Prosperity	2.5	Aspiring Homemakers
4.2	Aspiring Homemakers	2.4	City Prosperity

Table below shows which buying audiences are most efficiently delivered by DM and door drops (based on item to impression multiplier)

Direct mail		Door Drop	
4.9	Male 35-45	3.1	Male 35-54
4.7	Female with Children	3.0	Male 18-34
4.6	Male ABC1	2.9	Female 18-34
4.5	Female 35-54	2.9	Female with Children
4.5	Female 18-34	2.9	Male ABC1
4.3	Male 18-34	2.8	Female 35-54
4.2	Female ABC1	2.7	Female ABC1

As discussed during the roundtable, time series data in econometrics thrives on observable period on period differences. JICMAIL demonstrates that there are considerable differences in the mail item to impressions multiplier between audiences, sectors and time periods. As a consequence, a far richer set of mail inputs can be factored into models.

The examples in the tables show the differences between different MOSAIC groups and typical media buying audiences and demonstrate that not all audiences are equal when it comes to mail reach and frequency. While men aged 35-54 have the highest multiplier for direct mail and door drops for example, 18-34-year-old men (a typically hard audience to engage with via traditional media) have the second highest door drop impression multiplier.

Converting mail items
into ad impressions

Trend analysis reveals that the impression multiplier varies over time, with seasonal trends observable across a range of sectors. In the example to the right, charity DM has higher interactions rates in Q3 observed over the last two years, whereas retail DM tends to record an uptick in Q4 – a key sales period for bricks and mortar stores. Acknowledging seasonality and employing an impression-based common language between econometricians and planners will add greater depth to the understanding of mail effectiveness.

Direct Mail Frequency Seasonality
— Retailer DM   — Charity DM
e.g. clothing, household, electricals etc
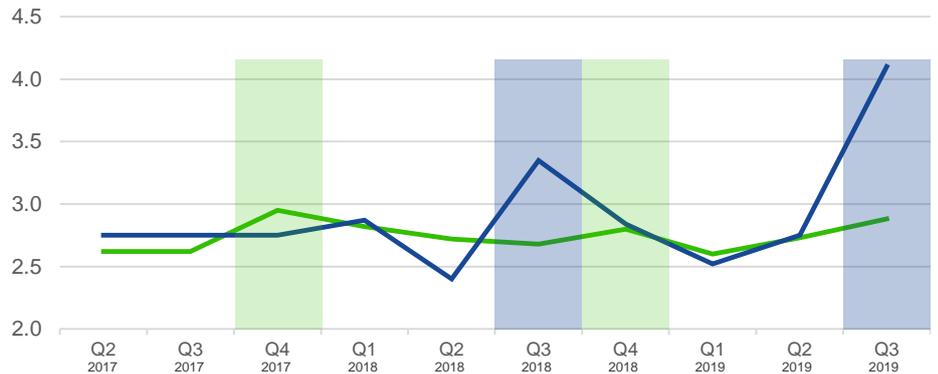
Audience Reach Curves

For those practitioners who require more in-depth analysis around frequency of mail exposure and interaction, accessing JICMAIL data via the IPA TouchPoints Channel Planner system provides the answers. Audience reach curves allow planners to measure how mail exposure builds with campaign volume (shown as Gross Ratings Points in the chart below), and provides a unique perspective on how mail impacts build steadily over the course of a campaign avoiding the risk of over-exposure.

Audience Reach Curves: Direct Mail and Door Drops
— Direct mail   — Door drops
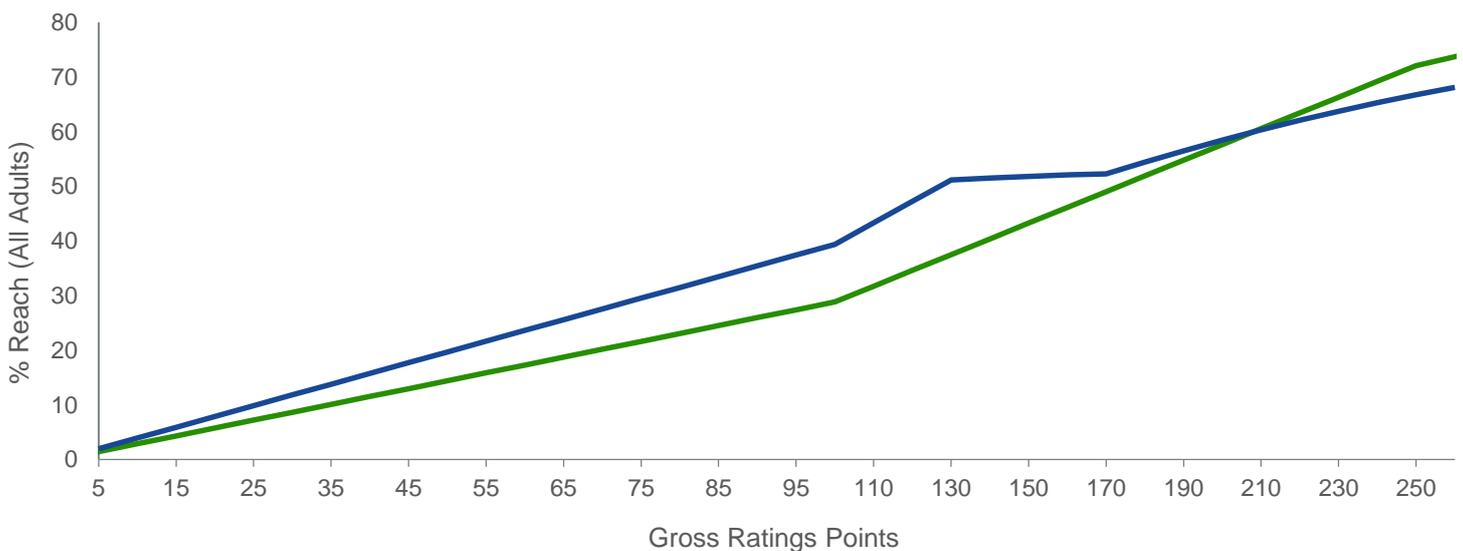
Source: IPA TouchPoints 2019

Freely available Audience Reach Curve (ARC) for mail can be found at https://ipa.co.uk/portal/ipa-services/arc-by-touchpoints/

Analysing mail behaviour to test model assumptions

"The one big problem in mail effectiveness is the data that we use to evaluate it. I don't believe sometimes that the industry's methodology of measurement is granular enough to pick up the true impact of it. The whole point of a powerful DM campaign is it is specifically targeted towards a smaller group of people. So, the smaller the more targeted your activity is within, the more difficult it is to pick up."

- George Gloyn, MediaCom

Measurement Best Practice

Despite the promise of data automation, it is rare that a one-size-fits-all approach will readily give us a complete view of campaign effectiveness.

A true measurement practitioner should be capable of synthesizing multiple data sources, methodologies and qualitative view points when building out their own measurement frameworks.

Seeking out new and innovative data sources that allow us to test hypotheses and learn about new consumer behaviours are a vital component of the measurement toolkit – helping us triangulate in on as accurate a version of the truth as possible.

	Challenges Outlined	JICMAIL Recommendation
1	There is a lack of industry data relating to mail behaviours with which to stress-test underlying econometric model assumptions.	Explore JICMAIL data to test model assumptions relating to a whole raft of mail behaviours: e.g. mail opening time lag, interaction rates by day of delivery and the endurance of mail effects throughout the month.
2	There is increasing pressure from clients to deliver not just ROI and ROMI outputs to models, but to provide a narrative that explains why underlying trends are being observed.	Both JICMAIL's bespoke data portal JICMAIL Discovery – and the access via key data bureaux systems (Nielsen IMS, Telmar and Kantar Choices) - allow physical mail interactions and lifespan to be assessed by numerous audience and mail types, providing previously unavailable insight into why overarching mail effectiveness trends are observed.
3	There is increasing pressure to explain differences between increasingly granular mail and mail content types.	Use JICMAIL data to not only report on direct mail and door drop effectiveness, but also newer innovations in the market such as partially addressed mail, along with 17 different mail content types.

JICMAIL can play a crucial role in testing underlying model assumptions about mail behaviours. As the data can potentially give practitioners more ways of legitimately exploring the way mail works, it should, as a result, discourage us from discarding some (possibly counter-intuitive) mail impacts early on in the modelling process. It will also provide us with new hypotheses to test.

One particular mail behaviour cited as of key interest in the roundtable discussion related to dissecting the lag between mail arrival and opening (or first look in the case of door drops). As JICMAIL demonstrates, there is an average lag of 2.6 days, varying by industry sector, with travel, publisher and finance mail opened the quickest.

Average number of days between receiving direct mail and opening
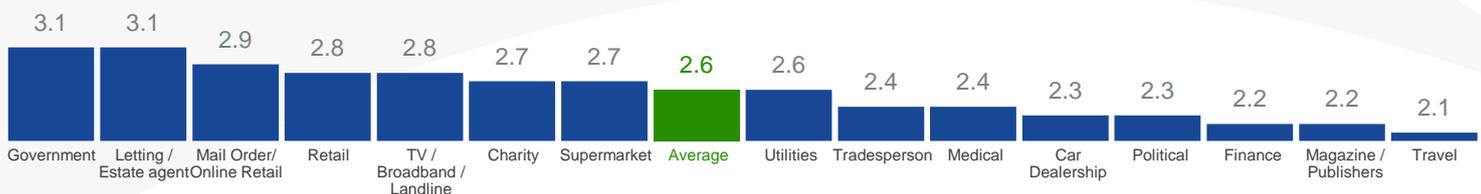
Government	Letting / Estate agent	Mail Order/ Online Retail	Retail	TV / Broadband / Landline	Charity	Supermarket	Average	Utilities	Tradesperson	Medical	Car Dealership	Political	Finance	Magazine / Publishers	Travel
3.1	3.1	2.9	2.8	2.8	2.7	2.7	2.6	2.6	2.4	2.4	2.3	2.3	2.2	2.2	2.1

Analysing mail behaviour to test model assumptions

Key JICMAIL Metrics by Mail Type

Item Reach

For every 100 people reached with direct mail, an additional 13 people will see your mail item. Direct mail is shared and has an additional reach of +13%

1.13
Direct mail

1.10
Partially addressed

1.05
Door drops

1.16
Business mail

Frequency

Partially addressed mail items are interacted with almost four times on average, over a 28-day period

4.17
Direct mail

3.97
Partially addressed

2.76
Door drops

4.64
Business mail

Lifespan (days)

Business Mail items are live in the home for nearly nine days

7.69
Direct mail

7.20
Partially addressed

5.50
Door drops

8.95
Business mail

👓 **"The big pressure on analysts in general is that it's not enough simply to provide the ROI anymore. It's the explanation of why that has changed and why that is what it is. And that's where JICMAIL data could become very powerful in explaining the difference in the performance of two different mailouts."**

- George Gloyn, MediaCom

Mail opening lag times are just one of hundreds of mail behaviours that can be explored in JICMAIL.

A, by no means exhaustive, list of other types of mail behaviours that could be explored includes:

Interaction by mail type.

Reach, frequency and commercial actions vary greatly between direct mail and door drops, but JICMAIL reporting does not stop there. Business mail (financial statements and loyalty reward schemes) interactions are recorded as well as newer innovations in the market such as partially addressed mail. As the figures to the left demonstrate, partially addressed mail metrics sit between direct mail and door drops – a reflection of its targeting capabilities and price point.

Interaction by day of week and week of month.

Frequency of interaction differs by day of week: a crucial planning consideration in the world of mail where delivery date is a controllable factor. Finance direct mail interaction tends to be highest at the beginning of the week, while for supermarkets direct mail interaction is highest at the weekend. Day of week and week and month analysis can be observed right down to the individual physical interaction or commercial action level – for example, consumers are more likely to be prompted to go online when mail is received at the weekend, but pick up the phone and call an advertiser when received on a Thursday or Friday.

Interaction by content type.

There are 17 content types captured in JICMAIL, ranging from vouchers and coupons, to information about local services to financial statements and bills. Each content type resonates differently depending on audience and drives differing commercial outcomes. This in turn can become a key variable in explaining mail performance and informing model assumptions.

Interaction by audience type.

JICMAIL data challenges many preconceptions around mail interaction rates. For example, younger audiences may receive a lot less mail, but their frequency of interaction is comparable with many other life stages when we drill down to a sector level. Building upon the basic demographic insight available via the standalone JICMAIL data set, fusions with TGI and YouGov enable the analysis of mail interaction across a range of demographic, psychographic and geo-demographic groups along with consumers of specific brands.

How long do mail effects endure?

JICMAIL interactions and effects are tracked for 28 days, giving us an accurate sense as to how the first four weeks mail ad stocks might decline in different sectors. Coupled with insight into what proportion of mail drives word of mouth (12% discuss a mailing with someone else), practitioners have a deeper understanding as to how mail effects endure.

Please note that the results reported for Partially Addressed Mail are based on mail identified by panellists as 'Addressed to Householder or Occupier'

Measuring the full range of mail effects

6∂ **"Some clients are still wedded to last click models of attribution. That's not a problem with the data: that's a problem with the methodology. What JICMAIL's data gives us is a way to improve that methodology. One of the things I was quite excited about was understanding when people open the mail because you then get a better idea of when the exposure happens."**

- Jamie Gascoigne, Brightblue Consulting

	Challenges Outlined	JICMAIL Recommendation
1	Econometric models have tended to measure just the direct sales impact of mail and clients rarely brief models to measure intermediary effects related to product discovery or word of mouth.	JICMAIL measures 12 different types of commercial outcome in response to mail exposure – many of which do not refer to a direct sale, but speak to effects further up the purchase funnel (e.g. word of mouth, store footfall, calls to the advertiser). These should be analysed by sector, mail, audience type and where possible specific advertiser mailers to enhance model output.
2	Many clients still rely on models of 'last-click attribution' in the digital space and are ignoring the effects that mail can have on driving digital outcomes.	JICMAIL reports that both direct mail and door drops can have significant impact in driving digital traffic. The relationship between mail and digital outcomes should be factored into model outputs.
3	The brand effect of mail is rarely discussed or acknowledged, yet it has the potential to have significant impact on above-the-line campaign KPIs.	Brand campaigns employ the metrics of reach, frequency and impressions as proxies for brand KPIs. If mail is to be considered in the channel mix for brand campaigns, practitioners should consider the conversion of mail items to impressions to report on the broader halo effects of mail exposure.

Measurement Best Practice

The sheer quantity of behavioural digital data now available to the average measurement practitioner (even after the impending death of the third party cookie) has driven an unrelenting movement towards measuring what we can and not what we should when it comes to campaign effectiveness.

An expert in effectiveness needs to have the clarity of mind to be able to hone in on the metrics that matter while at the same time painting the fairest and fullest picture of effectiveness. Brand advertising will have a short term response effect and direct response advertising will also have an impact on longer term brand KPIs.

Media channel level data that provides a perspective on the full range of effects is crucial.

Measuring the full range of mail effects

As is true for any channel for which an abundance of response metrics are available (not least digital), it is often the broader picture of effectiveness that is ignored by traditional measurement systems and methods. JICMAIL measures the broader halo effect of mail exposure beyond that which is measured by unique tracking codes. As the chart below demonstrates, there are a range of mail effects which exist higher up the purchase funnel – effects that relate to product discovery through website visits, store footfall and word of mouth. Econometrics budgets are not always sufficient to model every single campaign KPI, but when placed side by side with JICMAIL, the full effects of mail becomes more apparent.

Commercial actions - addressed mail

● Follow Up   ● Immediate   ● Total

% total mail items

Source: JICMAIL Mail Item Database Q2 2017 to Q3 2019, Addressed Mail n = 55297"

Commercial actions – door drops

● Follow Up   ● Immediate   ● Total
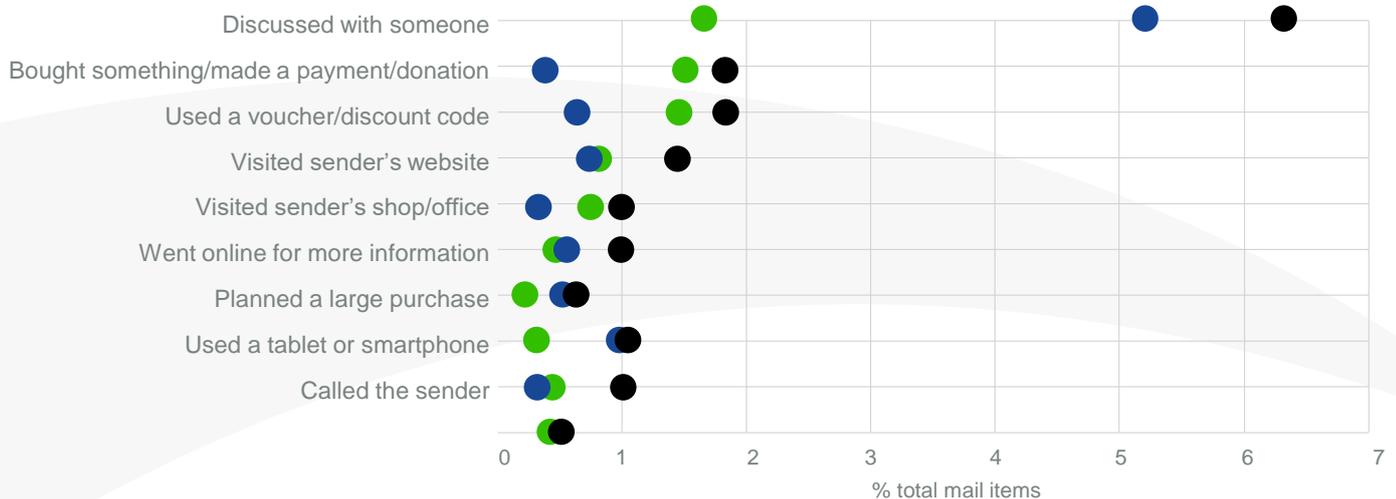
% total mail items

Source: JICMAIL Mail Item Database Q2 2017 to Q3 2019, Door Drop n = 25963

Follow up = action taken in 28 day JICMAIL measurement period; Immediate = action taken on day mail is received; Total = all actions taken in 28 day period

Measuring the full range of mail effects

JICMAIL and attribution

For those operating in the world of direct response, the question that JICMAIL often raises is one of why practitioners should worry about making mail analysis more sophisticated in econometric models when clients largely measure mail themselves via a trackable URL, code or phone number.

Measuring via a trackable URL, code or phone number is useful but can be a bit like "last click" attribution as applied to digital media. JICMAIL complements this perspective because it paints a broader and more complex picture of mail effectiveness.

Econometricians have the ability to express a broad range of commercial outcomes in their models, yet because these responses vary greatly by industry sector, it is often difficult to sense check them against model assumptions. Difficulties can also arise when econometric results differ from those derived from unique tracking codes.

Travel companies, for instance, may ask for brochure codes when clients book. Consumers may have dug that brochure out weeks after they received it because a message in another medium activated the coffee-table pile. The URL type response thus neglects the relationship between mail and other media (see figure below) and also entirely neglects any longer-term brand-building effects a consistent mailing programme might have. JICMAIL data can be used to understand a far broader range of commercial effects throughout the purchase journey – both physical and digital.

While we should acknowledge the broader effects of mail in the purchase journey, we should take care not to simply shift the problem of last-touch attribution from one media to another. JICMAIL data usage should not contribute to siloed thinking but rather should elevate how we think about mail effects from a multi-touch attribution perspective.

Mail – Direct and indirect effects

External Factors (Economy, weather, competitors)

Other Media (TV, Digital, Press, Inserts, Advertorials, PR etc)

Coffee Table

Bookings

Enquiries

Indirect effects (Prompted by media and other factors several weeks after mailing)
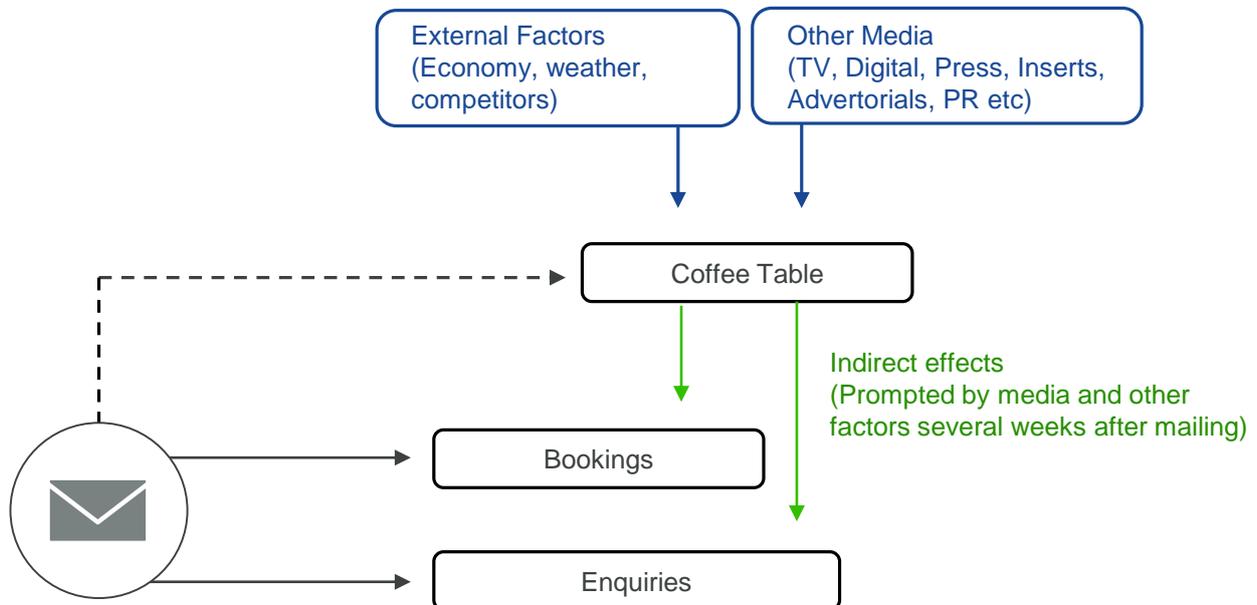
Measuring the full range of mail effects

Mail Lifespan

Discussion from the roundtable also focused on the 28-day tracking period employed by JICMAIL. There was a broad consensus that 28 days is both sufficient for measuring direct response effect (unless the campaign relates to contract switching which may require a longer time frame to judge effects), and also suitable for longer term measurement of higher funnel effects. Mail lifespan is a key reporting metric in JICMAIL with considerable variance by sector, mail type and audience type, and becomes another potentially useful input into models.

Direct Mail item Lifespan ● Target Audience Adults 17+

Sector	Lifespan
Supermarket or grocery store	10.17
Restaurant or takeaway	9.63
Government / council	9.11
Magazine/newspaper Publisher	8.35
Retailer (eg clothing, household electrical)	8.31
Medical (NHS/Dental/Private/Chemist/Optical)	8.16
Car Dealer/Manufacturer	8.12
Utilities provider (Gas/Water/Electric)	8.11
Local Tradesperson	8.01
Mail order/online retailer	7.46
TV/Broadband/Landline/Mobile	7.44
Financial and Insurances services	7.09
Charity	7.02
Letting or Estate agent	6.88
Travel/Tourism/Attractions	6.23
Political Parties	6.23
Religious Organisations	5.48

Source: JICMAIL Item Data Q2 2017 to Q2 2019 n=55,297 Addressed mail items,

Assessing brand specific and competitor mail campaigns

👓 **"There's a huge benefit in understanding how Mail in a given industry is actually working. Within any one model, you've got so many things to try and sort out, that you can very easily think you have identified a special case which is, in reality, not right. The ability to actually compare with established outcomes is very interesting. You can see whether your particular theory is likely to hold water or if it's just a complete and utter flier!"**

- Louise Cook, Holmes & Cook

	Challenges Outlined	JICMAIL Recommendation
1	While mail volume counts act as robust sources of time series data for econometric models, any enhancement that allows practitioners to assess observable differences in the nature of mail response over time will benefit model outputs.	While industry level reach and frequency data can be used to convert mail items into impacts/impressions, for larger advertisers JICMAIL contains a raft of brand specific data that can be used to calculate campaign average interaction rates, enhancing model time series inputs accordingly.
2	Accurate sources of mail volume data relating to who has mailed what and when are surprisingly hard to come by – especially for large advertisers with siloed CRM, print and marketing teams.	While it is the top-tier of mail users whose individual mail campaigns will be picked up by JICMAIL, data pulled from JICMAIL's Mail Item Database can be used to give a detailed view of campaign dates and audiences reached by mail type where internal process do not allow.
3	There would be considerable value for brands in being able to assess competitive activity within mailout timeframes, while assessing audience and targeting overlap.	The JICMAIL Mail Item Database should be analysed by practitioners at the item level to measure campaign performance over time, competitor performance within the same frame, and the overlap of key audiences and households targeted within a given time period.

Measurement Best Practice

The search of incrementality is the ultimate goal of any measurement practitioner – allowing us to tease out the differences between native consumer demand and ad driven sales or brand effects.
It is rare that industry currency data provides both a perspective on advertiser sector commercial effectiveness, and that of specific individual brands and campaigns. Comparing the differences between the two is a fundamental step in contextualising campaign results and moving one step closer to measuring true incrementality.

Assessing brand specific and competitor mail campaigns

Although it was originally conceived as a planning tool to provide benchmarks at an industry category level (for example covering data from 30,000+ financial services mailers, 14,000+ retail mailers and 8000+ supermarket mailers amongst many other categories), the nature of JICMAIL's item level tracking methodology opens up the potential
for further applications of the data. Of the 130,000+ items measured, the largest mail channel advertisers in the UK will not only be able to search the JICMAIL Mail Item Database for one off use case of mail interaction but will also be able to assess average mail campaign interaction frequency, item reach and commercial actions.

An example of some of the mail counts from the last 12 months (including direct mail, business mail and door drops) for the UK's largest advertisers

TESCO	863	Sainsbury's	533	HSBC	318
Domino's Pizza	799	sky	515	BARCLAYS	312
farmfoods	769	HALIFAX	492	WAITROSE & PARTNERS	308
Santander	744	HM Revenue & Customs	432	co-op	304
Specsavers	719	Virgin	382	SCREWFIX	300
Nationwide	606	LLOYDS BANK	349		
barclaycard	577	BT	338		

Source: JICMAIL Mail Item Database Q2 2018 to Q3 2019

The applications of this data are numerous:

1. **Performance over time**
   In the example to the right, a well-known finance brand has seen interaction rates dip in Q3 2018. How does this correlate with tracked direct response rates and can these figures help us unpick mail performance in greater depth? Where sample size is sufficient, performance can be measured at the weekly level. This offers valuable intelligence at the model briefing stage.

2. **Performance by audience**
   Analyse audience interaction rates over time by advertiser brand to understand what effect audience targeting is having on campaign performance.

3. **Performance vs industry benchmarks**
   Uncover whether brand level reach and frequency is under-performing or over-performing industry level benchmarks and assess relative mail impact versus industry norms.

4. **What has been mailed and when**
   Where there is no single internal reporting system or where complete mail data is difficult to obtain for other reasons, there is a sense that at its most basic level JICMAIL is itself a useful repository of information regarding what has been mailed and when. Econometric teams can find this data hard to source directly from larger organisations – especially when mail is used reactively to achieve short term KPIs. JICMAIL can remove the hurdle of trying to establish exactly how mail has been used and of having to talk to different teams and agencies when gathering mail campaign data.

Campaign measurement sample output from JICMAIL

	Direct Mail Frequency
Finance Average	4.30
Santander	4.36

2018	Q3	3.9
	Q4	5.2
2019	Q1	4.1
	Q2	4.2

HSBC	4.36
LLOYDS BANK	4.34

Source: JICMAIL Mail Item Database Q2 2018 to Q3 2019

Assessing brand specific and competitor mail campaigns

5. Competitive analysis

As a transparent industry currency, JICMAIL provides the same level of data to brands and their competitors. Campaign performance can be assessed in the context of what competitive activity has been happening in the same period, what brands have also been targeting your core target audience, and how performance has varied by region. Roundtable attendees specifically cited the value in assessing cross over exposure (i.e. whether or not the same audiences are seeing mail from competitor brands), along with details in profile differences between competitor targeting. As the figure below demonstrates, Virgin's mail has a greater weighting towards London, Midlands and the North West when compared to Sky, with the same level of analysis available across numerous household and audience demographic data breaks.

Profile of mail items by region

Source: JICMAIL Mail Item Database Q2 2018 to Q3 2019"

Best Practice Econometrics
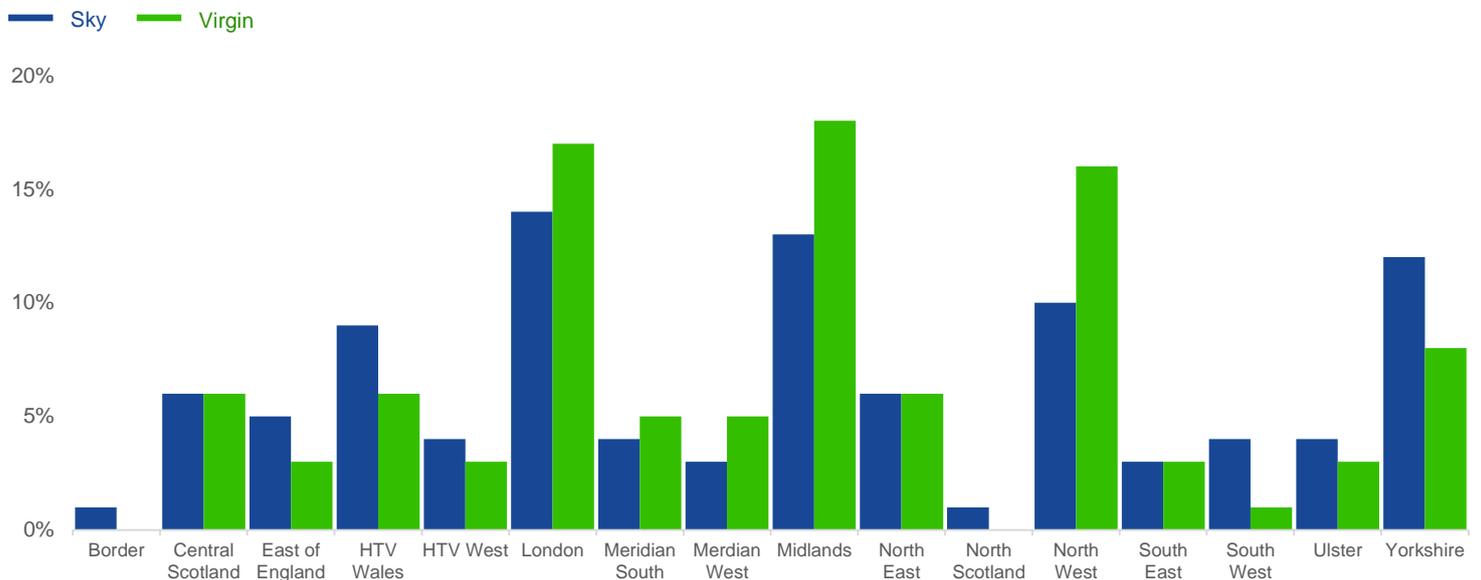
Future proofing JICMAIL

While the roundtable participants provided an illuminating discussion on the application of JICMAIL data in the field of econometrics, it should be acknowledged that there are a number of potential enhancements that will further improve its application to effectiveness models.

These in turn will be considered in the context of a long-term roadmap for product developments as JICMAIL evolves into a fully embedded planning tool across all elements of the planning ecosystem.

Measurement Topic	Potential System Enhancement
Customer Churn	Anecdotally it appears that many models do NOT take churn into account. If mail has a role in reducing churn rates then JICMAIL should consider how this is incorporated into its own effectiveness measures.
Lifetime Value	Another metric of increasing importance but one that is under-represented in many models. How can JICMAIL help us report on mail's effect in boosting LTV?
Time Series Campaign Data	While the largest advertisers have hundreds of mail items at their disposal to analyse in the Mail Item Database, the same is not true of the long tail comprising the rest of the market. What can JICMAIL do to increase panel and sample sizes in this regard?
Trend Analysis	Observable changes over time are the foundation of the econometric modelling process. Enhanced trend analysis functionality within JICMAIL systems will reap rewards.
Passive Measurement	Passive (rather than self-reported) measurement of mail exposure should be the aspiration as it is for any media. What sell side systems can JICMAIL leverage to make this a reality in the long run?
Incrementality of commercial actions	In the context of measuring the wider commercial impact of mail, JICMAIL's suite of commercial actions paints a broad picture of mail effectiveness. However, whether or not these effects are truly incremental should be carefully considered. Only through the application of JICMAIL data to underlying model assumptions and time series data can incrementality be truly measured against the wider cross media effect.

Summary of JICMAIL key data points

Below is a summary of the key data points provided by JICMAIL that can enhance the econometric modelling process

Frequency and interaction by mail type

Interaction by content type

Mail open rate lag

Mail lifespan

Audience interaction rates

Length of mail commercial effects

Commercial effects throughout customer journey

Model Inputs & Assumptions

Mail campaign impacts/ impressions

Commercial impacts/ impressions

Seasonal industry category trends

Advertiser specific mail interaction rates over time

Time Series Data

Model output

Model output

Model output

Model output

JICMAIL Best Practice Econometrics checklist

JICMAIL data will add value at every modelling phase by influencing the way we incorporate mail into models.

It will help with data requests, with expressing mail's effects mathematically, assessing whether outputs are valid and informing how we report and benchmark results. Ultimately, econometric results which all parties acknowledge are representative, will enable seamless optimisation across all media, and not least with mail.

Stages of Econometric Model Build

Inputs

1. Convert mail items to reach and impression metrics using JICMAIL gold standard planning data and assess whether this is a better way of capturing specific mail effects than item numbers alone: either via JICMAIL Discovery, or through IPA TouchPoints Channel Planner.
2. JICMAIL trend analysis reveals seasonal variation in frequency of mail interaction by industry sector. Factor JICMAIL trend data into underlying model assumptions (and bear this in mind when interpreting results).
3. The mail item to impressions / impacts multiplier varies significantly by audience type. Factor impacts into underlying model assumptions.
4. JICMAIL captures the top-tier of mail users' mail activity by individual campaign. JICMAIL's Mail Item Database can be used to give a detailed view of campaign dates and audiences reached by mail type, either as a cross-check or as a vital input where incomplete data exists.

Development and Interpretation

5. Use the JICMAIL Mail Item Database for data on campaign performance over time and for information on competitor performance within the same frame. Information is also available on the overlap of key audiences and households targeted within a given time period and this in turn may unlock why variations in effectiveness occur.
6. Explore JICMAIL data and use as the basis for formulating and testing hypotheses relating to a whole raft of mail behaviours: e.g. mail opening time lag, interaction rates by day of delivery and the endurance of mail effects throughout the month.
7. Use JICMAIL data to explain and help validate not only direct mail and door drop effectiveness, but also newer innovations in the market such as partially addressed mail, along with 17 different mail content types.
8. Use JICMAIL's ability to measure physical mail interactions and mail lifespan against numerous audience and mail types as a basis for searching for and identifying any overarching mail effects.
9. For larger advertisers JICMAIL contains a raft of brand-specific data that can be used to calculate campaign average interaction rates, providing useful benchmarks and cross-checks for econometric results.
10. Brand campaigns employ the metrics of reach, frequency and impacts/impressions as proxies for brand effectiveness. Practitioners should consider the conversion of 'brand' mail items into impressions to enable them to be jointly evaluated and any brand-level halo effects identified.

Evaluation and Implementation

11. JICMAIL measures 12 different types of commercial outcome in response to mail exposure – many of which do not refer to a direct sale, but speak to effects further up the purchase funnel. Consider analysing JICMAIL by sector, mail, and audience type and using this data to enhance and supplement the output from the econometric modelling.
12. JICMAIL reports that both direct mail and door drops can have significant impact in driving digital traffic. The 10% of mail driving digital outcomes should be factored into model outputs, enabling a more holistic assessment of mail's impact.

JICMAIL Best Practice Econometrics checklist

Use this checklist to ensure you are considering mail in all stages of econometric model building

Action	Check
Inputs	✔
1. Convert mail items to reach and impression metrics	✔
2. Factor JICMAIL trend data into underlying model assumptions.	✔
3. Factor mail item to impressions / impacts multiplier into underlying model assumptions.	✔
4. Use the JICMAIL Mail Item Database to give a detailed view of campaign audiences reached by mail type.	✔
Development and Interpretation	✔
5. Use the JICMAIL Mail Item Database for data on campaign performance over time and for competitor performance within the same frame.	✔
6. Use JICMAIL data as the basis for formulating and testing hypotheses relating to a multiple mail behaviours	✔
7. Use JICMAIL data to explain and help validate newer innovations in the market such as partially addressed mail, along with 17 different mail content types.	✔
8. Identify overarching mail effects by using physical mail interactions and mail lifespan against numerous audience and mail types	✔
9. For larger advertisers use JICMAIL brand specific data to calculate campaign average interaction rates.	✔
10. Convert brand mail items into impressions to evaluate brand-level halo effects	✔
Evaluation and Implementation	✔
11. Use JICMAIL commercial outcomes by sector, mail, and audience type to enhance and supplement the output from the econometric modelling.	✔
12. Factor in mail propensity to drive digital traffic.	✔

About the authors

Louise Cook
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Louise has been evaluating marketing and communications activity for the last 30 years. She has run Holmes & Cook, her own independent econometrics agency, since 1996, before that working client side at Beechams, and for creative agencies Ogilvy and BMP DDB (now part of Adam & Eve DDB). She is passionate about producing econometric models which are robust and which work well in the real world and has made an ongoing input to industry evaluation standards, writing the technical guidelines for the econometric models which are submitted as part of IPA Effectiveness case-histories. She chaired the econometrics judging panel for the 2016 IPA Effectiveness Awards and is the author of Econometrics Explained.

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Ian is an insight professional with over fifteen years of media and advertising measurement experience. His career has spanned the measurement of offline and online media through roles at Kantar, The Guardian, JICMAIL and his own independent consultancy, Data Stories Consulting. Ian is a DMA awards judge and has close links with industry bodies across the advertising landscape.

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