Building A Better Print and Digital Measurement Platform...The Journey Continues

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Introduction

Twelve months after Vividata launched a Single-Source Print and Digital Study (SSPD) in 2015, the media and consumer landscape in Canada experienced significant changes. Now approaching two years after launch, the pace of change has quickened. New media research techniques are emerging, publishers' business models have radically changed from where they were a few years ago and the march to digital continues at a frenetic pace.

This paper is part two of the journey; the initial chapter was presented at the London 2015 Symposium

The journey and the challenges

In March of 2016, the first full study was publicly released to Vividata members. For the first time, Canadian newspapers and magazines had a single-source study reporting cross platform readership. Agencies had the most comprehensive database that provided not only multimedia product and lifestyle data at the national level but also at the local market level.

This was undoubtedly a major accomplishment for a newly amalgamated organization to continue to provide readership currency to the market place without disruption despite a fundamental change in study design.

The emergence of technologies or new research approaches presents new challenges and opportunities; often so many that addressing them all at once is impossible. By working with key stakeholders and users of the data, Vividata began to overcome some of those challenges while simultaneously exploring the opportunities that new research approaches offered.

Prioritizing and tackling the issues in an orderly fashion allowed Vividata and Kantar TNS to focus on finding answers (through testing) to some of the key questions, such as:

- 1. How do we build and maintain a representative sample?
- 2. How do we measure print readership?
- 3. How do we improve our digital recall questions?
- 4. How do we improve the product survey?
- 5. What is the best way to measure digital readership?

How do we build and maintain a representative sample?

One of the recurring issues facing market research is the ability to adequately represent all cohorts of the population. Although the methodology utilized by SSPD has moved away from a response rate study, there continues to be relative success in representing a wide cross section of Canada's 12+ population across 50+ markets.

This is to say that the data collected is generally from a representative sample as the profile is very consistent nationally, provincially, and across the large markets quarter over quarter. But there are still some low response rates (with corresponding "small" sample sizes) for some cohorts. This limits ability to conduct cross sectional analyses plus relatively "large" weighting factors may be applied to these groups, amplifying changes in audience.

After a comprehensive review of the first 6-month sample, two key demographic groups were identified as potential candidates for an oversampling or supplementary sampling option.

Allophones

Historically, it has been a challenge in both readership studies preceding Vividata to capture Allophones (Canadians whose mother tongue is neither English nor French) at the same level of incidence as reported in Statistics Canada. While language weighting brings this demographic in line with the population, it is important to have an adequate sample for cross sectional analysis. This group is particularly important in Montreal as Allophones represent a sizeable readership group for some publications.

'C-Suite'/Business Owners

Senior level executives ('C-Suites') and business owners are niche segments of the population that are important to business-oriented publications and media planners. The 2015 results showed a general "flattening" of readership by household income for publications that historically skewed towards business audiences and lower incidence of usage among selected business-related categories.

Although the survey design protocol oversamples high Income geographies to capture senior level executives and business owners, the incidence of executives was lower in the SSPD 2015 sample compared to PMB 2015 (an impact from methodological change).

A decision was made to continue to monitor the Allophone sample and focus on the 'C-Suite'/Business Owners cohort. The objectives for treatment of this executive group were to:

- 1. Continue to optimize the representation of the sample;
- 2. Increase the incidence of senior executives and other business groups (comparable to Statistics Canada); and
- 3. Ensure all publications can be measured and reported.

The following options were considered:

Options	Impact on 2016 Study (N=36,000)	
Increase the rate of oversampling of HHI and Professionals	 Potentially add ≈1,000 (HHI and Professionals) Increase proportion of HHI in the total sample to 37% (from 31% in 2015) 	
Utilize a specialized business third party online panel to supplement the main sample	Add approximately 1,000 senior level executives (C-Suites), and business owners	
Door to Door Recruitment and personal in-home interviewing	Reduction of 10,500 interviews per year (to 26,500) interviews to offset the cost of adding 1,000 interviews	
Utilize a list from business related organizations to recruit and supplement the main sample	Add approximately 100 senior level executives (C-Suites), and business owners	

The following approaches were incorporated into the 2016 SSPD study design:

- 1. Increase oversampling of HHI and Professionals through Landline
- 2. Utilize a targeted business online panel to supplement the main sample.

A new trend has been emerging in 2017 where we are seeing a decline of 25-34 year old consumers participating in the research through the traditional method (telephone recruitment). A similar cohort - 18-24 years - is currently being purposefully sampled using online panels. We are exploring diverse options that would supplement a broader 'under 35 years' cohort.

How do we measure print readership?

The convergence of technology, changing consumer behaviour and media fragmentation continue to challenge media researchers to revisit methodologies used to determine print readership. Many methodological issues related to print readership that were discussed and debated more than 20 years ago, remain unresolved.

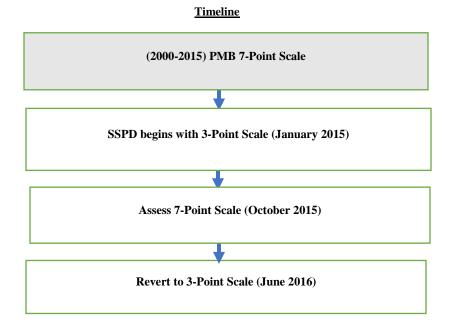
The recent reading (RR) methodology is the core of the SSPD readership measurement approach. In the past, other readership measurement approaches were utilized in Canada. PMB (magazines) adopted RR in 2001 but used the Through-The Book approach (1973 to 2000). NADbank (newspapers) used the Issue Specific readership methodology.

Test: what recency scales work best?

The readership qualifying interval scale is integral to the recent reading model. However, the number of scale points that constitute the readership qualifying interval scale remains debatable as indicated by the variety of recency scale points used by readership studies across the globe.

In 2015, the SSPD magazine qualifying interval was based on a 3-point qualifying interval scale instead of a 7-point qualifying interval (as previously used in PMB). The 3-point scale (i.e., Time Period 1 (TP1), Time Period 2 and Longer Ago) was thought to be less burdensome on respondents completing a battery of readership questions.

However, determining the "best" scale has been a bit more challenging. The chart below shows a timeline of changes to the recency scale.



October 2015: Move to 7-point scale

Although the move to a 3-point scale did not fundamentally alter the underlying recent reading model in terms of the calculation of the AIR readers, this 'smaller' scale appeared to have had an impact on magazine readership when compared to PMB. A review of magazine readership found that the reduction in number of qualifying intervals;

- appeared to have triggered a shift in the recency of reading from TP1 to TP2 (that is, less recent reading) or from TP2 to a time period outside the qualifying range and,
- resulted in potential telescoping, especially among older and very occasional readers.

June 2016: Move back to 3-point scale

While a 7-point scale and 3-point scale are "theoretically" equivalent, they are in "reality" different. A review of 15 months of data led to the following conclusions:

- A self-completion environment coupled with changing consumer habits makes it difficult for respondents to accurately answer detailed time scales.
- 2. A 3-point scale appears to be the best way to "accurately" measure recency of reading.

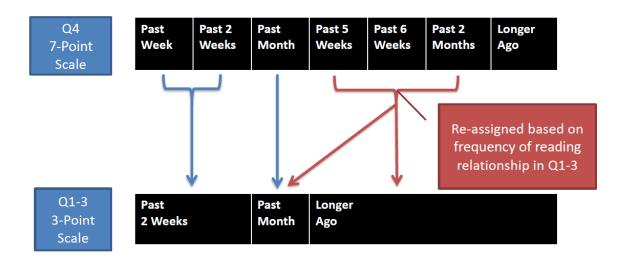
Approach to converting 7-point scale to 3-point scale

The next step was to convert respondents who completed the survey based on a 7-point scale after the change in October 2015 back to a 3-point scale.

Several case studies that were related to readership and brand research were reviewed. Two basic approaches were determined:

- 1. Model based and,
- 2. Reclassification of respondents based on the correlation between recency and frequency of reading (Kantar TNS recommended approach). This approach was implemented as follows;
 - a. Some respondents who were outside of the AIR Qualifying Intervals were re-assigned as readers under the 3-point scale and.
 - b. Some readers outside of the AIR Qualifying Intervals but who were in "other time periods" (excluding "Longer Ago") were also moved to the 'Longer Ago' bucket.

Figure 1: Monthly Magazine



The main criteria for the remapping of respondents in the above was based on the strong relationship between recency and frequency of reading.

Enhancements of readership questions: How do we improve our digital recall questions?

The 2015 results pointed to potential issues with the readership question, specifically there was clear misattribution for readership by digital platform when assessing Apps, Websites and Digital Replicas separately.

Qualitative research

To provide "more accurate" digital audience estimates, new readership questions and definitions were required to help respondents distinguish between digital and print as well as within digital. The initial step was to conduct qualitative research (through cognitive interviewing) to provide a better understanding of how people were completing the survey. The approach was to have consumers complete the survey and pause at various points to qualify their understanding of the questions and more importantly, their thought process in determining their answers.

In the fall of 2015, qualitative research was conducted in Toronto and Montreal with the over-arching goal of refining the digital section of the readership survey and better reflect consumers' understanding of the online ecosystem. This qualitative test was developed within a framework that ensured participants represented the relevant population (12+), reflected a variety of demographic groups (age, gender, income) and range of different behaviours (heavy digital and/or print). The project was managed by Kantar TNS.

Here is a summary of the qualitative research objectives and key findings:

	Main Objectives		Key Findings	
1.	Reduce potential misattribution	1.	Print clearly understood / Digital (Platform) clearly	
2.	Reduce potential title confusion		misunderstood - consistently inconsistent	
3.	Reduce or maintain current (40 mins) length of the survey	2.	Device used to access digital content seems to help filter	
4.	Reflect consumer behaviour and technology		behavioural recall	
5.	Collect metrics relevant to Vividata stakeholders	3.	Level of familiarity impacts accuracy of answers. That is,	
6.	Incorporate insights from other jurisdictions		occasional readers are 'guessing' when and how often read	
		4.	Usage is tied to occasions when likely read as opposed to recalling the actual 'reading' sessions	

The 2016 Readership questionnaire reflected a new structure and flow based on the following (with a graphical representation in Figures 2 and 3);

- 1. Brand-centric approach but filtered by format
- 2. Two streams (Print vs Digital)
- 3. Print: maintain existing metrics and approach (recent reading, mechanics etc.)
- 4. Digital: measure at generic level with device and how consumers access digital at second layer
- 5. Digital readership frequency reported to reflect industry norms (daily, weekly and monthly)
- 6. Total Readership (Brand footprint) now based on how medium is bought and sold (Print AIR + Digital Monthly readership for both magazines and newspapers)
- 7. Wording and definitions based on current consumer understanding
- 8. Structure adaptable to changes in technology (digital)
- 9. New digital readership questions

Figure 2: 2015 Readership Questionnaire Structure

Brand-Centric/Platform Approach

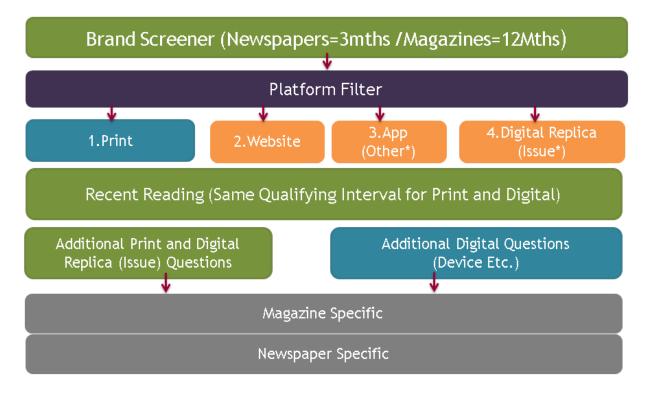


Figure 3: 2016/2017 Readership Questionnaire Structure

Brand-Centric/Format Approach (Print and Digital)

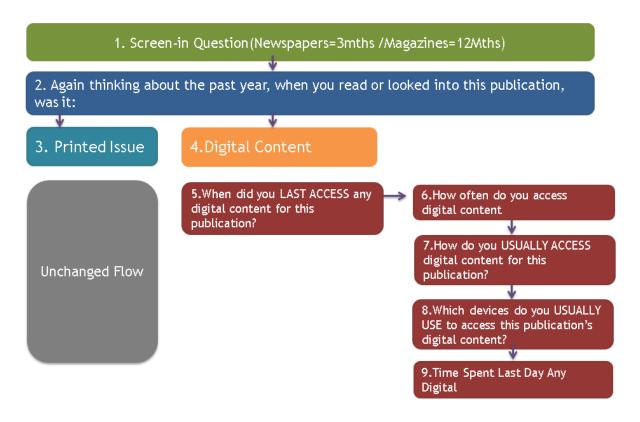


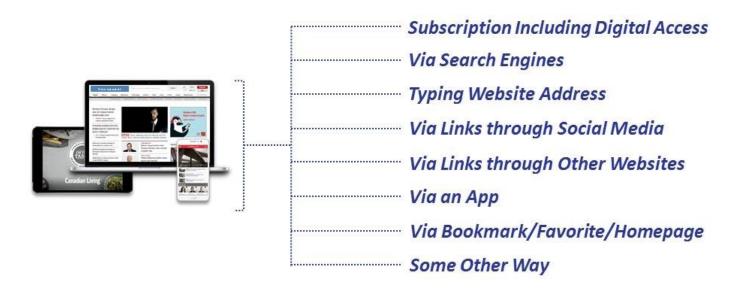
Figure 4: Devices Used to Access Publication's Digital Content (2015)

Available for Magazines and Newspapers



Figure 5: Ways of Accessing Digital Content (Added in 2016)

Available for Magazines and Newspapers



Beyond readership, building a better mousetrap: How do we improve the product survey?

The previous Canadian studies (PMB and NADbank) included a leave behind/mail-in paper based questionnaire that covered a wide range of topics on product/brand usage, lifestyle and behavioural questions.

The move to an online survey meant that the paper-based product and lifestyle questionnaire could not simply be ported over to this environment. A different approach was adopted with SSPD. The result was a core product questionnaire with two primary sections consisting of five questionnaires each. Each questionnaire had categories by topic and included key questions to optimize the ascription process.

This structure and approach was maintained in 2015 and 2016. A few minor improvements were made along the way but most changes were limited to wording changes.

In 2016, a limited qualitative approach was used to assess the flow and language of the questions in the product survey. However, previous learnings allowed us to undertake a detailed review process. This process covered the following areas:

Questions:

- Reduced inconsistencies (phrases/wording)
- Removed duplicate questions
- Added new/deleted out-dated questions
- Moved from 10-point rating scale to 5-point scale
- Deleted "non-sponsored" questions where appropriate
- Updated answer list for questions where appropriate

Design

- Implemented "minor" layout fixes for selected questions
- Improved questionnaire flow
- Added filters/skips where applicable
- Grouped topics/related questions
- Split "extremely long" answer lists where technically possible
- Reviewed current structure approach Core
 + 10 sections
 - Reduce the impact of "Small Sample Size" on the Ascription model

Post Editing Data Processing Rules:

- Eliminate respondents that use a pattern (e.g. all selected or have a specific pattern for answering the scale (straight lining))
- Created data handling protocols for major questions
- Developed "simplified' check tables for product survey

The 2017 product survey continues to be based on multiple questionnaires with a core questionnaire plus two sections (but four instead of five questionnaires in each section). This approach provided more completions per section, and hence, a more robust base size.

Measuring digital readership: what is the best way to measure digital readership?

In 2015, the platform centric approach was adopted to measure digital readership and centred on replicating a digital "average readership" for three main platforms: App, Website and Digital Replica. These platforms reflected the business models used by most publishers at the time and was Linked to how media planners incorporated brand footprint and individual platforms in their planning models.

As explained above, there were several challenges related to measuring digital readership for both newspapers and magazines. Consumers struggled to articulate the platforms they used and hence could not accurately reflect their overall digital consumption, never mind the details (e.g., time spent). Simplifying the platforms in the survey (as in 2016) has resulted in "better" data on digital consumption. However, there remains a lack of details on overall consumption (e.g., visit characteristics and profiles by device/platform).

Measuring online behaviour passively is the most accurate method for gathering digital behaviours versus asking people to recall the details of their digital consumption. Recall-based measurement is susceptible to respondent confusion, misattribution, and telescoping. All these factors combine to produce inaccurate estimates and profiles of digital behaviours. Passive data eliminates these biases and has been a key focus for Vividata in 2017.

There are several options available that would improve the existing measurement and are to be piloted in 2017.

- 1. Use AAM Site Certifier metrics to calibrate Vividata recall data
- 2. Use a panel (managed by Kantar TNS) and calibrate Vividata recall data to comScore/Omniture data
- 3. Build a 100% digital passive measurement fully funded by Vividata

With the AAM Site Certifier approach, consenting respondents had cookies placed on a device and were tracked when visiting websites that had an AAM tag. The data collected allow us to view their originating site (e.g., search, Facebook, etc) as well as compare their recall data to their measured behaviour. As of now, we have completed a 9-month pilot project and are reviewing an analysis of the passive data, in isolation as well as in conjunction with the recall data. More details to come.

The pilot using the Kantar TNS managed 'Vividata community' of prior respondents from the main readership survey would be a meter-based approach with the software being downloaded to several devices in the household and would allow us to track all the online behaviour of the panelists. The panel would be representative of the Canadian population and would deliver passive data continuously. The end goal is to have the passive data merged with the recall data and be used to inform/calibrate the recall data as part of a complete single-source cross-media/cross-device database. This pilot is expected to be done in Q4'17, stay tuned.

The next chapter

Measurement needs to constantly evolve to ensure we are capturing the metrics as accurately as possible. The Canadian newspaper and magazine audience measurement also needs to remain dynamic. The potential for including passively collected data is a near-term approach. Additionally, Vividata and Kantar TNS continue to seek out additional value to deliver to the industry through branded media impact research, path to purchase, and more.

See you in 2019!