EVOLVING CONSUMER MOBILE APPLICATIONS: CONTENT, CONSUMER EXPERIENCE AND OTHER INSIGHTS FROM *THE WEATHER NETWORK*

Pat A. Pellegrini, Ph.D. and Gita Ashar Pelmorex Media Inc. / The Weather Network

1. Introduction

In today's rapidly changing world of consumer technology, traditional content publishers that depend on advertising as a core stream of revenue are forced to re-invent themselves to entice and retain advertisers and audiences. Today, audience reach and frequency are insufficient; audience engagement is key. Publishers like The Weather Network, and our French language counterpart, MétéoMédia (hereafter abbreviated to TWN/MM) are no longer competing against our direct verticals (other news and weather providers) but against all search and content groups as GPS on mobile applications (apps) can be easily integrated with local weather content. TWN/MM has been on the vanguard of mobile technology given the nature of our content and products, and so has been a leader in shaping the landscape of consumer and advertiser mobile application experiences.

This paper describes TWN/MM's successful strategies to remain the mobile leader in Canada and grow internationally in the face of unprecedented and fragmented competition. While weather content consistently outperforms search and social media as the most sought after content on mobile, the ubiquity of such content has pushed scientific research towards breakthroughs in 'consumer-centric' weather products. For example, the so-called 'Start-Stop-Precipitation' product that benefits the consumer by providing highly granular and local precipitation forecasts, 'what to wear' features, air quality and pollen reports that are niche and can be built for consumers but with sponsor partners – all with obvious advertiser appeal. Specifically, this paper will focus on "rethinking what it means to give back" and the value the TWN/MM/MM apps provide to consumers today, and how that must also extend to advertisers, as both constituents are equal players in a truly integrated app experience. Said another way, we want the mobile app experience to be as valuable and important for consumers as well as advertisers and we achieve this with a content rich, highly integrated app experience.

To understand this important concept as distinct from alternate development paradigms (for example, Classic web, Mobile web or even HTML5 based apps that cannot cultivate immersive interactive experiences leveraging on a smartphone's native features such as geofencing), one may consider the example of search based on location - in this regard, what makes iAd or AdMob a more popular mobile advertising platform versus showing advertisers the benefits of my brand vs investing in their own native app development? For the TWN/MM app to appeal to advertisers, TWN/MM knew we needed to show advertisers the depth of our content and how it can be integrated with their business requirements via technology, design and relevant, related content. Our strategy is consistent with contemporary consumer-centric 'path-to-purchase' analysis concepts that focus on the sequence and intensity of relevant behavior and discovering where consumers are most open to marketing messages and placing advertising where consumers want it. What are people doing when they buy a product, and how can the mobile experience we provide with advertisers influence the path-to-purchase and even in-store experiences? How does a high engagement and high frequency app like TWN/MM help influence decisions? In this paper, the authors take a brief historical view of the evolution of TWN/MM apps and provide an intriguing look into the future of these hightouch, high-frequency, highly-targeted applications. The paper also provides background into TWN/MM content development which involves the science behind the acquisition, processing, quality control and cross platform, cross market distribution of weather and weather-related content, leading to a discussion of the evolving consumer app development and design. The paper ends with a discussion of a case study example of this concept in practice at TWN/MM - the patio finder product.

2. Background: Mobile Apps, Content Development and the Evolving Consumer

TWN/MM mobile apps offer consumers an interactive experience, a premium user experience and 'on-the-go' real-time content. While the desire for favorable weather conditions (especially across much of Canada) draws our consumers to download the application and open it multiple times a day, the threat of a big snowstorm, or other inclement active weather is the obvious reason to continually check the latest forecast (especially during the summer and winter months). Therefore, TWN/MM apps provide massive reach and frequency because of the habitual behavior and relevant content – a natural advantage over other mobile applications.

The TWN/MM mobile app story provides relevant background to help understand our contention that content, user experience and advertiser experience must coalesce for a consumer and advertiser win – win proposition. As leaders in the mobile media and apps industry in Canada, TWN/MM is committed to listening and acting on user feedback to provide the best user experience and functionalities on all our apps across all platforms. In fact, reacting quickly to user feedback started when TWN/MM was only a TV station and is part of the brand philosophy. In 2006 when we started our venture into apps - Blackberry was the leading smartphone and had a strong user-base in Canada and so we decided to build the first smartphone application on Blackberry supporting OS 4.1. While the Blackberry application took almost a year to complete, Apple in the

meantime launched the first iPhone and our first app on the iPhone launched in March 2008. Since then, we have launched multiple versions of the iPhone and Blackberry apps, launched apps on the Android platforms (phone and tablet) as well as supporting Windows 8 devices. All apps are native to the specific operating system (i.e., it is not a one size fits all solution but rather a custom build each time) as it increases ease of use, functionality and heightens consumer experience.

The results of our efforts in the mobile app space have been exceptional. Since its initial launch in 2007, the TWN/MM iPhone app remains one of the top free apps in the Apple iTunes store. TWN/MM mobile applications hold over 65% of the overall weather universe in Canada—this despite major competition from global players and pre-loaded applications in Canada. In addition, we remain the #1 mobile brand of Canada- ahead of historic Canadian brands like CBC, The Globe and Mail, Kijiji, Blackberry and others (comScore Mobilens, Canada, June 2013 report). Other evidence of our success in the app world comes from Apple. Apple continuously includes our app in various "Featured Categories" that they feel are relevant to their consumers (see Figure 1 below "Made In Canada", "Travel", "Hall of Fame"). In fact, comScore's MobiLens report has acknowledged TWN/MM as the most recognized brand in Canada for Mobile (comScore Mobilens, December, 2011). In February 2012, Apple reached a milestone 25 million app downloads in Canada and the TWN/MM/iPhone app is listed as the #3 of the Top All-time Free Apps.

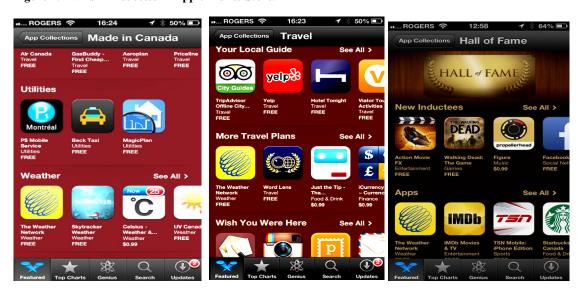


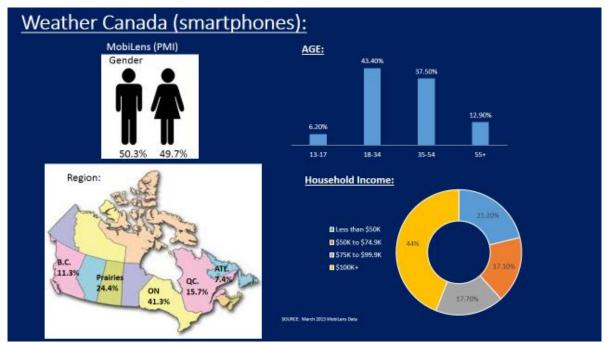
Figure 1: TWN/MM success in Apple iTunes Store.

Looking specifically at reach, a number of TWN/MM mobile app milestones can be examined. First, total mobile (apps & web) unique users (UU) reached over 7M (duplicated, and unduplicated at 6.6M). Second, mobile reach passed 4.5M bringing our weather share to almost 70% (in comparison the #1 app Facebook has 7M UU in June 2013). Tablet app reach is over 1M taking 20% of market share in Canada, while mobile web reach surpassed 3M, currently, at 2.8M (Source: Omniture figures for TWN/MM; comScore Mobilens, June 2013). A similarly successful story is shown in engagement metrics where mobile apps Page Views (PVs) surpassed 500M in July 2013, visits per unique up to 24 and pages per unique crossed 100 (110 PV/UU). Tablet visits up to 14 per user and PVs crossed 45M (44PV/UU) with mobile web PVs nearing 38M (Source: Omniture figures for TWN/MM, June/July 2013). This success is tied to a major transformation of TWN/MM weather apps that ushered in with the introduction of three key features:

- Always On Experience (''Follow Me'' feature): TWN/MM app will provide you with location-based weather as well as notify you of severe weather alerts, UV index, Pollen Report and Air Quality.
- Highly Contextualized: TWN/MM app can GPS locate and update weather content fluidly as you travel.
- **Plan For Anything**: School, parks and airport forecasts available in the new app will help users decide what to wear, when to leave the house to catch a flight, or what the weather and bug activity is in the local provincial park.

In the past 5 years, we have seen a significant shift in consumer behavior as Canadians start to move from traditional communication channels to mobile. At TWN/MM, we are noticing the change in user-behavior, while most Canadians depend on the mobile platform to plan their day, the activity heightens during active weather (rain, snow, storms). Mobile apps alone garnered over four billion impressions the past year, averaging over 300M page views a month which is a year over year increase of 71% (Omniture Sept, 2012-Aug 2013). Interestingly, the user demographic ranges from 13-54 with 24 to 35+ making almost 50% of the share (comScore Mobilens, June 2013). Figure 2 below summarizes the weather Canada universe demographics for mobile based on comScore Mobilens survey data.

Figure 2: The Weather Canada market.



(Source: comScore Mobilens, June 2013)

3. The TWN/MM Evolving Consumer Mobile App Strategy

In the past, content providers and consumer goods and services pushed their products with strong brand messaging via mass media outlets such as TV, radio, online brand messaging. In the traditional purchase funnel model, consumers starting with a set of potential brands, then awareness, then familiarity, followed by consideration, purchase and ultimately loyalty. Today, as most marketers know, this concept fails to capture all the touch points that influence the consumer's content and buying decisions. The 'Digital Era' is the disruptor that has traditional businesses rethinking their strategies. No longer can business units and marketing departments plan for a five year horizon and hope to stick to the plan. Change is the only constant and businesses have to be nimble, innovative and consumer focused to survive the disruption. In brief, publishers and marketers should not be thinking of channel silos or budgeting by screens, but rather about the consumer-- how much do we know as publishers about whether we are offering our consumer an opportunity to engage with the brand, product or message. We think we need to take a step back from telling the customer what to do (i.e., from being a passive user of our content) to providing them with options and opportunities to engage.

We believe that consumers are looking for relevancy, the experience of the product, how it makes them feel, the need it satisfies, the information it provides that will motivate them to tweet, share socially, and engage with the product and brand. Said another way, the key for the consumer is the ability for the content and brand to respond to specific (sometimes, only for the moment) desires and requirements, empowering the consumer with real-time information to drive conversion and, potentially, close the sale. Hence, publishers and content providers have to think less about responsive design—making a version of their website to work on mobile platforms — and instead, they should be looking at leveraging the on-the-go capabilities of the mobile device, create an active user experience that is rich, takes advantage of the location information and builds a advertising experience that will influence the consumer decision to take action. As a result, focus also needs to shift away from audience volume obsessions, focus less on scale and incremental reach, and more on engagement with the content, brand and advertising message.

It is estimated that by 2016, 350 million workers will use smartphones — 200 million of whom will take their own devices to the workplace. By that year, consumer spending in the mobile app market will amount to \$56 billion, and business spending on mobile projects will have doubled, the study found. (Forrester, 2012). While smartphone shipments achieved majority penetration in major markets like the US, feature phones remained the majority in emerging markets – until recently. IDC estimates that some 51.6% of all shipments were smartphones globally (IDC, 2012). The global implications for a successful mobile media and app strategy are more important than ever, and align well with TWN/MM's ambition to be a leading provider of worldwide consumer weather and weather related information across diverse platforms and distribution channels.

As with other global, high quality weather providers, TWN/MM must ingest and processes numerous 'big data' sets to deliver relevant, granular, and engaging content. We aggregate, create, add value, quality control and build cutting edge consumer weather and weather related and help deliver them across platforms through sophisticated processes. The challenge in the recent past has been to balance the goal of understanding the significance of the consumer brand and staying true to the core brand ideals, while at the same time dealing with the increasing device and behavioral fragmentation across platforms and consumers. In response, TWN/MM has worked to influence and create user needs and habits, for example, by permitting access to 'up to date' and dynamic radar maps so Canadians can look at coming storms or precipitation events for themselves. Such is not the case in other markets with other local suppliers where radar maps are not nearly as popular with consumers because they have never had easy access and compelling presentation of such data. By taking advantage of big data processing and delivering important weather information in an easily digestible presentation, as with radar data extrapolation, we can continue to deliver relevant, timely and engaging content for all locations for all consumers.

Brand History

While many are familiar with TWN/MM brand, it is important to provide more detail about the growth of the brand across platforms. TWN/MM provides niche content (weather) to a mass market (Canada, Spain, and other European markets). In delivering niche content to mass markets, TWN/MM has considerable experience with big data (formally, data that is too large, complex and dynamic for any conventional data tools to capture, store and analyze); the present challenges are the most complex yet and are essential to deliver the "right here, right now, the way I want it" content for the personalized, mobile consumer. While challenging, big data in the weather space provides great opportunity for engaging new products and has allowed substantial improvements in current observations, forecasts in temperature, precipitation and other parameters important for consumers to plan their daily and weekly activities, and essentially permitted the creation of more relevant and engaging weather and weather-related content. From sub-hourly forecasts, precipitation start-stop timing, 1km highly localized forecasts (which we call PointCast), air quality health indices (AQHI), pollen conditions and forecasts, big data and the power to process it has been a renaissance of sorts for the science of meteorology.

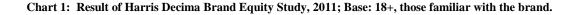
Founded in 1989 and owned by private company Pelmorex Media Inc., TWN/MM has been in the weather and weather related information business for almost 25 years. Our users and viewers consume our product offerings many times a day. We are a trusted source of information. Our brands (including MétéoMédia, Travelers Network, Beat the Traffic, Eltiempo.es and Réseau Voyageurs) are highly recognized and we are present across all screens – we are a successful and true multi-platform media company who recognized early the need to be distributed widely. In this regard, the real break-through to launch the brand was the initial development of so-called PMX which is a proprietary technology to deliver high quality, reliable weather information across Canada in a localized fashion on national broadcast TV, and since then, TWN/MM has continued with an aggressive distribution and technology strategy. The Ipsos-Reid brand study ranked TWN/MM as 16th most influential brand in CA, and 6th amongst Canadian companies only. We are also the largest private employer of professional Meteorologists in Canada which attests to our commitment to world-leading content development.

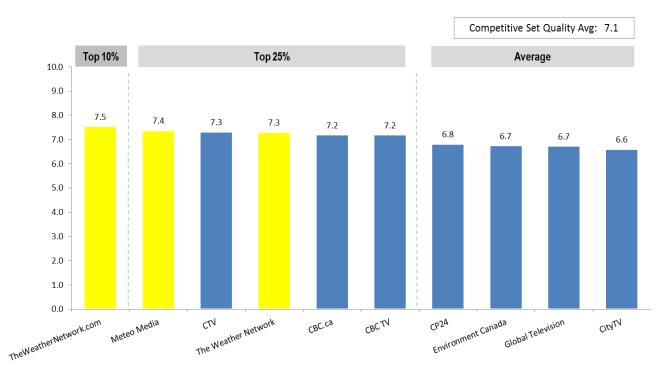
TWN/MM's core purpose is to provide the most accurate, up to date and relevant weather information through leading technology and content so consumers can be better prepared and plan their day. We are on all smartphones and tablets, interactive TV, HD screens and in car navigation. We reach the majority of our consumers across more than one platform, and in an average month we reach some 20 million Canadians through at least one of our products. Cross platform measurement is difficult but we have commissioned several studies including one by reputable Environics in 2011 which showed TWN/MM as, far and away, the top choice for weather across all Canadian media brands across all platforms: TV, Web, PC Apps, and Mobile Apps. These data are show the strength across platforms – something we need to continue to grow to deliver a great user experience, especially for mobile apps. The chart below (Chart 1) contains data from the 2011 Harris Decima Equitrends Brands of the Year study. TWN/MM is with in the top 10% of all media brands for brand equity, top 10% in familiarity across media brands, and our products are seen as high quality among consumers. In 2012, the same survey identified TWN/MM as a brand "on the move" by becoming the highest ranked in its sector – specialty TV. This puts us in the same company as Google, Tim Hortons, Apple, Kitchen Aid and Under Armour who also led in their respective sectors.

Building Relevant, High Quality Weather and Weather Related Content

The key to relevant, high-quality and engaging content, we believe, is in creating this content yourself. At TWN/MM, this starts with the Meteorological Operations (or Met Ops) area. Met Ops for TWN/MM is a 24 hour, 7 days week, 365 days a year operation – in both quiet weather and active weather, we are working. The work flow starts with big data; supercomputers do the grunt work of weather forecasting. In order to produce good forecasts, you need to harness the best available numerical weather prediction (NWP) models. Our primary sources of NWP are from the Canadian Meteorological Centre in Montreal, and from the National Centres for Environmental Prediction in Washington D.C. These are the critical inputs which feed our Pelmorex Forecast Engine (PFE) which further refines the forecast information. People and technology take over the work flow from there, notably through five operational desks which run continuously to provide the best value-added forecast information for Canadians via manual, expert quality control. So called 'briefing' meteorologists

in Montreal and Oakville provide detailed briefings to programming staff and create custom explanatory products for TV and digital platforms, including mobile. The Forecast Centre in Oakville, Ontario, Canada uses the Graphical Forecast Editor (GFE) software, adding value to the numerical weather prediction models. The GFE allows our meteorologists to produce custom maps of, say, forecast rainfall for a large storm, or a forecast of wind that might cause severe damage. This is essentially the final step of the work flow for meteorological operations as it moves to the development of products and information. As mentioned, many of the maps you see on TV and across all digital platforms are created by the briefing meteorologists, but also forecast information is conveyed by on-air presenters. Briefing meteorologists provide special briefings and in-depth contextual information about active weather across the country. This process is repeated every day, for every weather event across the country - increasingly with an eye beyond our borders.





The science behind high quality consumer weather and weather related forecasts is complicated and dynamic, but also a perfect match for the growing mobile smartphone enabled consumer. In fact, there are many scientific "sub-systems" within TWN/MM meteorological data processing, including radar feeds, satellite data, lightning incidence and prediction, so called 'nowcasting' (forecasts for 0 to 6 hours out), forecasts, current observations, climatology, road weather conditions, and these all must link to product generation systems via geographical information systems (GIS) profiling so that highly localized data can be produced quickly (Pellegrini and Saini, 2012). A detailed discussion of the key meteorological processes that are important in order to upgrade present capabilities and maintain worldwide leadership are beyond the scope of this paper, but a brief explanation is important as it is intrinsically linked to the core theme of the paper and our evolving mobile app strategy – engaging consumers with great content and providing a platform for a highly integrated consumer and advertiser experience.

Weather forecasting can cover a range of time scales and different techniques apply for different situations, but we focus here on consumer weather information for daily, weekly or short term activity planning. Using chronological order within the meteorological data time continuum, we can look at developments in observations (current conditions), nowcasts (predictions in the very short term, from now to 6 hours into the future, with a focus on active weather like rain, snow, thunderstorms) and finally forecasts (predictions further into the future) in the TWN/MM strategy. For current conditions, an enhanced 'observation engine' is critical to success (for calibration of forecasts and nowcasts) and continues to be an area of concentrated research effort. We are formally connecting the PFE with observations in order to automatically calibrate the forecast data to create better quality forecasts (called Bias Correction) while also using big data statistical techniques for the blending of numerical weather prediction models such as those from CMC in Canada, NCEP in the US, and ECMWF in the UK. In addition, we continue to improve our nowcasting system which will support local and frequent weather alerts for the next few hours (via statistical data processes like 'forward error correction' to automatically calibrate various parameters). And finally, we plan to research improvements to the 1km downscaling process for PointCast localization. However, despite all this technological development, the expert human forecaster will remain an integral part of the weather forecasting

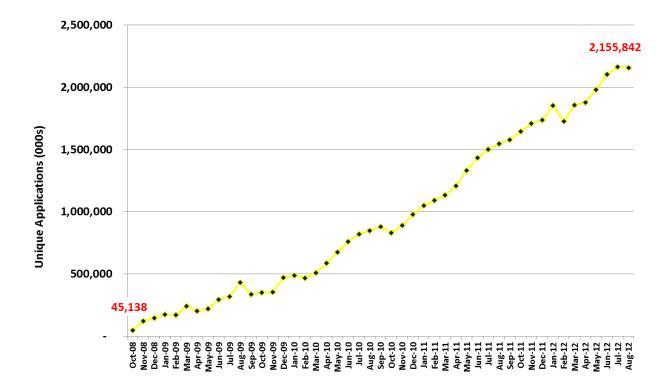
process, and this remains a key point of differentiation for TWN/MM (Pellegrini and Ashar, 2013).

Weather radar information, as noted earlier, is a perfect example of influencing consumer behavior and providing relevant content. However, radar information is updated multiple times an hour and the huge data volumes need to be processed in a timely manner. Weather radar is a remote-sensing technology which continuously sends pulses of microwave radiation outwards. The beam of transmitted radiation is reflected by various 'target' objects, some of which give useful information about the weather (precipitation) others which do not because they are non-weather targets (birds, insects, trees, buildings, traffic, hills, mountains, the ground). The reflected radiation is received as a signal at each radar and provides information on the intensity of precipitation (but also some contamination from the non-weather targets). Radars are situated at discrete locations, but the range of the beam from each radar is about 240km so each radar can cover a significant volume of the atmosphere. The resolution of each radar is on the order of 1km or less. There are about 30 (every 10mins) radars in the Canadian network, about 150 (every 5mins) in the US network. A specially designed, proprietary radar processing system (CRAD) collects data that is generated by each of the 180 radars in North America and combines them into one product – a "composite" which contains all of the individual radars every 10 minutes. Radar data imagery is provided to all platforms and is an excellent example of how investing in big data solutions provides quality content and the important first component of an engaging consumer and advertiser experience (Pellegrini and Saini, 2012).

Content and the Mobile Platform

As more and more data become available, the processing challenges will force continued infrastructure and research investment; since 2006, TWN/MM has increased Canadian current observations from about 600 to 10,000 locations and forecasts from 1000 to over 160,000 locations, with similar magnitudes of data volume, variety and velocity increases across radar, satellite, postal codes, weather alert zones, and other products. Compelling content drives consumer demand which in turn challenges TWN/MM to continually deliver up-to-date and comprehensive weather products to all platforms. Mobile is especially challenging in that users expect similar quality forecasts (of course) but also comprehensiveness in product scope. Said another way, we are finding that users who were 'turned on' to using their own radar maps on the web, or seeing them on TV, want a similar, real-time mobile experience. Enabling the processing and delivering across a growing number of platforms, carriers and distribution channels is an ongoing challenge, but especially given the growth in mobile (Pellegrini and Saini, 2012). Chart 2 below shows the TWN/MM iPhone app growth since Oct 2008 to over 2MM unique applications and a top place in the App store as a free app. Similarly, Android which launched in Aug 2009 to over 680k unique apps, and the iPad app since Dec 2010 jumped quickly to over 560k unique apps. As an example of continuing mobile growth, in the last week of June 2013, when there was active weather across Toronto, Montreal, Calgary and Saskatchewan, mobile engagement (visits) went up to 17M on a single day (up from the typical 9M single day average). This is not surprising given that weather is one of the top mobile categories in Canada with 67% accessing the category on their smartphones and tablets, according to the latest comScore Mobilens data. Weather influences our everyday decisions, from what to wear to planning the perfect weekend for a BBQ party, or simply deciding to water the vegetable garden today. Hence, weather information is referred to multiple times a day, every day. The trajectory of the line in Chart 2 is not flattening any time soon, and we need to continue to deliver great, personal, highly relevant and engaging content to these platforms on an ongoing basis.

Chart 2: Growth of TWN/MM iPhone mobile apps.



The TWN/MM mobile brand has remained in the iTunes top 50 free apps since its launch – generally siting within the top 25. This is a major accomplishment as thousands of apps (especially games) are launched every day, and many are free. We believe this is due to our focus on the consumer experience and constantly improving our weather content-providing consumers with the native experience, leveraging mobile media's interactive and local capabilities combined with relevant weather and weather related information that matters in significant ways to consumers. In fact, since the launch of our first app in 2006, we have learned a great deal about consumer behavior through consumer feedback and relevant usage metrics. The initial use of mobile devices to get a quick reading of current weather or hourly forecasts has now moved to a more fascinating experience that engages and absorbs the consumer with the weather content. For example, weather related content such as airport forecasts, pollen report, and parks forecasts have enjoyed year over year audience increases of over 80% on mobile. Time spent on apps (and keep in mind-loading time on apps is extremely fast) has gone up from 2mins to 5mins per user on our apps, on average. We attribute this growth and behavior, at least partially, to multi-screening behavior via simultaneous and sequential digital media consumption. That is, a large number of studies, including internal TWN/MM surveys, show some 80-90% of media consumers utilize multiple screens, and smartphones are the most common starting point with TV viewing inspiring continued engagement with that same content on tablets or smartphones; TWN/MM has had a long established TV presence on the Canadian 'must carry' basic cable tier. TWN/MM internal studies show that Canadians make use of up to four platforms to obtain their weather and weather-related information. We have noticed that our consumers do not limit their consumption of weather any one of the four screens. The choice of screen to a consumer appears to be a matter of what is accessible at the time and how the access point satisfies their current need, at least for weather content. Given this insight, two strategic thoughts come to mind: how do we keep the consumer within our ecosystem. That is, what do we need to do to extend that moment of need and keep their attention on our content – are we providing the right content and experience to justify their time? Finally, how do we transfer this knowledge and strategically plan ad campaigns that become part of that extended moment.

A successful mobile strategy involves understanding consumer decision making, the influence of strategic brand marketing and the relevancy of content and advertising for consumers. Consumers are constantly weighing options, comparing the TWN/MM brand against other pre-loaded weather options to make decisions, and similarly for other brands where consumers compare before making potential purchase decisions. In our view, getting the fulfillment from a weather app is almost similar to using search, especially in a country like Canada, where much of our daily activity is planned around weather. Hence the question when building the app concept is, fundamentally - are we providing consumers with the complete and necessary information and motivation they need to make a decision? In addition, does the consumer find the information required to make key decision because the app user flow and content is 'just right' to increase relevancy and therefore engagement? Such a mobile strategy involves a focus from sheer volume to engagement metrics. Advertisers and publishers must believe that interaction with the brand is more powerful than just counting eyeballs. Thought needs to be given to the concept of expanding engagement within each platform versus a focus on cross platform strategies; create the engagement at the moment and with the screen the consumer is engaged with. We believe advertisers are rethinking their marketing budgets to be more content-centric and built around consumer engagement, and this goes hand in hand with the increasing need to understand user behavior. This suggests, of course, a focus on consumer-centric analysis and a holistic

view of the consumer decision making and path-to-purchase rather than, say, a more deterministic attribution analysis. A successful mobile strategy depends on our ability to first analyze user behavior around compelling content and associated relevant advertisement placement, followed by predictive analysis, to learn, for example, what prompted a user to click the advertisement and was it a weather condition that triggered a response, or was it intelligent creative strategy, or both?

4. Case Study: The Patio Finder Product

Summer has always been a high traffic season for Pelmorex as Canadians plan their summer weekends, evenings and holidays. Given the long and often harsh winter, Canadians generally love their summer and are almost always engaged with the weather via their mobile devices. One other favorite summer ritual for Canadians is the patio experience; across Canada, people are looking for the best meeting place for their friends and family, comparing their exposure to sunlight and perhaps people-watching too. In this case study, we illustrate how advertisers can leverage native mobile features such as maps along with quality weather content as part of their mobile media campaign to build a powerful branded experience, and also promote sharing and conversation with complimentary activities like weather and a patio. TWN/MM partnered with an advertiser that liked the notion of Canadians on a patio and have a product that was synonymous with patio - a cold refreshing drink. This past summer, one of the leading breweries in Canada decided to try this concept to bring attention to, interestingly, one of their non-alcoholic beer alternatives that they offered but which was, at the time, largely unknown in Canada. In this case, the advertiser reinforces the brand message and with the help of many partner patio locations and leverages the fact that both weather and a refreshing drink promote conversation and social media interaction, continuing the brand experience beyond the advertising placement. The beverage advertiser wanted to attract family and friends to enjoy the day at the patio with a beverage choice for everyone, especially women and children. Hence the 'patio finder' product that in previous summers typically promoted beer, this time was all about enjoying a non-alcoholic beverage and the nice day at the hottest patios in town.

The patio finder product is a customized GPS location based product linked to granular weather data that provides a map populated with local patio locations via the GPS coordinates from the users smartphone. For consumers with GPS disabled, a list of patios appears in place of the map. The campaign ran for about four months (from May 2013 to August 2013) with the objective to have TWN/MM mobile weather consumers easily navigate to the nearest patio and be exposed to the new product the advertiser was promoting. Unlike other campaigns that are targeted by time of day, are weather triggered, or just based on volume—the ads for this advertiser were pre-negotiated. Placements included a 'dashboard icon' which is a custom ad placement created on the menu page of the app for iPhone and Android. In this regard, the icon placement has been custom built and is major differentiator for the advertising brand versus previous campaigns using a patio finder type application. This is also an advantage over a hardcoded banner on the mobile web kit or rotating banners on the mobile app, and so while great sunny weather is known to drive traffic to the patio finder product, this particular season's campaign would differentiate concept versus weather driven results via different ad strategy and a non-alcoholic, more family friendly product promotion.

The campaign results were extremely positive. The dashboard placement (on mobile phone apps) saw the largest year over year increase of ad impressions which more than doubled with click through rates (CTRs) growing by 30% year over year. Engagement on the patio finder page itself increased by almost 50% year over year. These results are compared to the standard patio finder product, and given that this past summer was quite disappointing in terms of the number of very hot days in some major Canadian markets like Toronto, it really speaks to the integrated patio, advertiser, dashboard icon and creative concept driving traffic to the site rather than simply weather triggers themselves like a great sunny day. This also supports the evolution of our app strategy to favor a deeper consumer and advertiser experience with relevant content. More evidence comes from viewing metrics on impressions, page views (clicks) to the patio finder page, and CTRs across the campaign period itself in Chart 3. We see that CTRs are far higher than industry standards and achieve 2.24% on a sponsored size ad (the far right bars which indicate a larger advertising placement) on tablets. However, it is the consistency across the metrics, while varying by tablet or mobile, that show that the success of the overall concept in driving traffic to the patio finder page, and engaging consumers to learn more about the product and where they might enjoy the patio experience.

On the mobile web, we can see further evidence of the success of the more highly integrated patio finder concept of summer 2013 versus summer 2012. In chart 4, we see that total page views, total visits and total unique visitors all increased substantially year over year, by 56%, 37% and 345, respectively. In addition, the monthly bounce rate, which describes behavior where a user simply has a single page visit and does not stay on the site, has dropped 10% during the campaign period which again supports the notion that the consumers are more engaged with the advertiser's integrated message and weather content than in the previous mobile campaign. Not shown on this chart, but worth mentioning is that the metrics summarized in chart 4 are stable across the four months of the campaign, not unlike those for the mobile and tablet apps that were discussed above in chart 3. Again, this stability supports the finding that the integrated patio finder concept delivered an engaging experience consistently through the summer months regardless of day to day, week to week, and month to month fluctuations in weather conditions alone. Besides these metrics, the advertiser feedback was very positive as they were able to serve highly customized and relevant content to consumers by sharing with them a perfect patio day, and drove the conversation with the consumer from the online space to offline behavior.

Chart 3: Results of patio finder (PF) campaign 2013 for mobile and tablet apps.

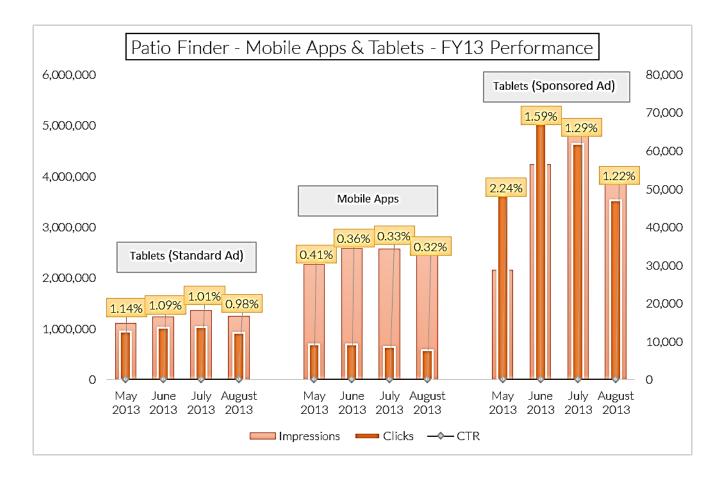


Chart 4: Mobile web metrics for patio finder.

PF Performance Summary (May - Aug)			
Metrics	FY13	FY12	Growth
Total Page views	259,815	167,073	1 56%
Total Visits	214,362	156,945	17%
Total Uniques	183,003	136,653	1 34%
Bounce rate (monthly avg)	60%	67%	-10%
Time spent on PF page (min)	1.5	1.8	-17%

The success of the patio finder and other campaigns that were built around weather triggers or weekend weather have spurred more concept ideas for the future at TWN/MM. Working closely with partner advertisers will allow us to leverage the power of the mobile platform in influencing marketing and will shape the future of content marketing. By closely examining metrics and behavior, the mobile influence on the consumer path to purchase will be better understood and utilized. Learning from mobile media provides guidance to online campaign efficacy in terms of our ability to serve ads based on specific audience characteristics, other than demographics, such as consumer's interaction with an ad, or sharing and passing along content. The key is to understand mobile behavior and integrate this learning into content and marketing strategies that focus on consumer needs and how we can apply technological advances to our marketing and provide a positive consumer and advertiser experience.

The key strategies that TWN/MM will be focusing on beyond 2013 revolve around building strategic partnerships with key and like-minded advertisers. We want to utilize the power of the TWN/MM brand and the expert knowledge of the weather business in terms of how it may influence lifestyles and choices for consumers. For example, in the clothing industry there are clear influences by weather and seasonal changes. Partnering with key advertisers will permit them to build highly engaging consumer experiences deeply integrated with weather so they can showcase their competitive product, and, for example also explain the science behind the product just as TWN/MM consumers enjoy the science behind active weather.

Delivering a highly personalized experience is also a goal utilizing a user initiated identity layer to access relevant TWN/MM content can make this a reality. Finally, creating strategic programming and content display for Canadians, and providing them with opportunities to engage - taking the step back from telling the customers 'what to do' to providing them with options and building scenarios to engage them – is always the goal. One can envision the use of augmented reality in mobile media to create the user experience of a major weather event like thunderstorm or snowfall while they are in their living rooms via the mobile app, all sponsored by a key advertising partner, to provide a great consumer and advertiser experience.

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comScore, MobiLens, Canada, various months.