Navigating The Multi-Screen Universe

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Leaving an era Behind.

For many, the hardest part about dealing with the realities of today's multi-screen media universe is getting over the preconceptions so many of us have about how media works today.

When it comes to advertising, most of us have been brought up to think of "media" as separate realms, each with their own forms of advertising. At the highest level there's "digital" vs. "traditional" media. Dig down into "traditional" and it's typically divided into television, print, outdoor, and radio...traditional mass media platforms. "Digital" is a little more complicated, but we can start with "mobile" vs. "web" and then break up each into smaller pieces based on format: "display," "search," "in-app," etc.

Considering how we divide things—and, to be fair, we're often forced to based on how media is bought and sold—it'd be easy to think that each medium and each format within that medium exists on its own. Television is separate from radio. Search is separate from online display advertising (a.k.a. banner ads). Mobile web advertising is different than mobile video advertising, etc., etc., etc. No surprise. You probably experience it every day.

Unfortunately in today's media universe, thinking in terms of these divisions is dead wrong.

But don't feel bad: it wasn't always this way. At some point in the past this kind of thinking was unavoidable. But the world's moved on. We're in a whole new media universe.

The rise and fall of **Convergence**.

Two things have happened to usher us into this media age. The first step was the digitization of nearly everything that came about as a consequence of the mass adoption of the Internet and the World Wide Web. Tim Berners-Lee invented the web because he was looking for an easier way to share scientific papers with his colleagues at CERN. As usage of the web spread, people began to realize that it could be used as a way to publish original content and publishers began to realize that it gave to understand the web not so much as a medium, but as a metamedium, a medium of media that could literally deliver everything that "traditional" media could deliver, all in one place. There was even a word for it: convergence.

The TV and the computer would become one and we'd all live happily with one big screen in the living room serving as our portal to all the content we could consume. But then a funny thing happened.

⁴⁴ There are even iPad games designed for cats.

them another channel to publish what they'd been printing. Not long after, innovative people began to realize that because the web could serve as a publishing platform for anything digital we began to see video, music, games, animation, and other digital content spread through the web.

And while technology and bandwidth may have initially limited the spread of digital content, early visionaries saw the potential and ran with it. In fact, Pseudo.com, the world's first online television network, was founded in 1993 and attracted millions of users before going down in spectacular flames during the dot-com bust of 2000 (check out the excellent documentary We Live in Public if you want to learn more about Pseudo). Over time, we began New types of screens started to pop up, screens that allowed us to access content over the Internet in a way that didn't feel like using a computer and didn't feel like television. Screens that were a lot smaller, a lot more portable, and a lot more, well, personal. First came smartphones, allowing us for the first time to access Internet content pretty much any time and any place as long as we could access a cellular signal. Then came tablets—not the wonky "personal digital assistants" of the late 90's (remember the Palm Pilot?) or the clunky "tablet PCs" of the early 2000's-but thin devices with relatively large screens and relatively long battery life (compared to laptops) that allowed us for the first time to curl up with "e-books" in a way that actually approximated reading a printed book, surf the web from the couch or the bed without

having to worry that our laptops would set our laps on fire, and play games just by touching the screen. They turned on instantly, ran for hours, and were literally so easy to use that a baby could be taught to use one (kinda). Heck, there are even iPad games designed for cats.

Instead of one screen "convergence" we got something very different: multiple screens that allowed us to multitask our content consumption in a very personal way that disconnected content from the limitations of time and space. "Web" content that we once had to sit at a desk in front of a computer for now could be viewed equally well on a bus, on a couch, or from the beach. Advances in streaming media made television and radio content accessible from anywhere on nearly any device, effectively freeing the media from their eponymous containers. New "time-shifting" technologies (eg. DVRs) allowed us to "tune in" to content whenever we wanted, and providers like Netflix and Hulu freed us from the tyranny of network programming schedules and video rental services. We had media on demand, any time, and virtually any-where.

Because these new devices were so portable, they also introduced a new dimension: simultaneous screen usage. Sure, in the past you could have sat down at the computer and watched television... as long as they were in the same room. Laptops made computing more portable, but they're still clunky and downright gigantic when compared to a smartphone that fits in your pocket. The advent of the smartphone and tablet marked the beginning of the multi-screen universe we find ourselves in today. And the reality of that universe may be a lot stranger than you think.

Through the Rabbit Hole.

The first sign that times were changing is the fact that younger people—usually the earliest adopters of new technology—have been slowly cutting down on their television consumption over the past several years. According to aggregated viewer data from Nielsen, in the first quarter of 2011, 18-24 year olds watched an average of 26 hours and 28 minutes of television per week. By Q1 of 2015, that number had dropped to 18 hours and 4 minutes. All other age groups show similar—if less precipitous declines in TV viewership. But the really profound change is not that we're spending time focusing on other screens but that we're spending our time using all these screens simultaneously. How much of our time is still up for debate—the MillwardBrown study found that 41% of screen use takes place simultaneously but another study by Microsoft found that an amazing 70% of consumers were using a second device "in some capacity" when watching TV—but whether we're using multiple screens 41% of the time or 70% of the time, the fact is that our attention is becoming increasingly fragmented. Where's that TV time going? According to recent research published by MillwardBrown, it's pretty clear that our attention is being directed to all those other devices. In fact, according to their study, consumers are spending more time (151 minutes) on their smartphones each day than their televisions (147 minutes). Laptops (103 minutes) aren't all that far behind, but at 43 minutes per day, tablets still seem to have a ways to go in order to get their share of our attention. In any event, when examined over time, our usage of screens other than TVs has increased 157% since 2010. why they were using other devices while sitting in front of the TV, 43% responded that they just wanted to "fill time," others (38%) were keeping up with their friends on social media, 30% didn't like being saddled with having to watch something someone else in the room had chosen, 26% said they were "busy and just needed to get things done" and 21% admitted to just "being bored with TV."

While those reasons do help shed some light on why attention wanders to other devices, one reason not mentioned above probably says more about the state of audience measurement and advertising effectiveness than any other. Thirty-six percent

"It was just background noise...

Television seems to be faring the worst. In a laboratory study conducted by "multi-screen video advertising technology company" YuMe designed to better understand what goes on in the multi-screen universe, it turned out that while test subjects favored the TV most out of the devices (53% of the time), they also spent less than half the time paying attention to it when other devices were available. In fact, the YuMe study found that attention to television dropped from the initial rate of 53% to a dismal 19% after only 4 minutes of simultaneous viewing.

Why does our attention wander away so quickly? The MillwardBrown study may provide some answers. When they asked the people they surveyed of the respondents in the MillwardBrown study admitted that they weren't ever really watching TV at all...it was "just background noise."

Why is this a big deal? Simply put, if these numbers are generalized to the entire TV watching population (or, in the very least, the 64% who own smartphones, it means that a big chunk of the TV audience reported to us by those who measure what people are watching on TV aren't watching TV at all.

The measurement devices might say they are, but chances are (between 41% and 70%, as you may recall) the TV's on but nobody's home, attention-wise.

So what's a marketer to do in the multi-screen world of today? Sadly, the answer for many seems to be to just throw up as much ad content as possible across as many screens as possible in hopes that it will "stick," a sentiment echoed by consulting giant pWc in their most recent Global Entertainment and Media Outlook report:

> "Internet advertising will increasingly become device agnostic...advertisers should be asking what types of content generate greatest consumer engagement rather than whether people are reading a website on a mobile device or not."

On the surface this kind of prediction seems to make sense. After all, isn't the idea of deploying content across multiple devices the whole idea behind the explosion of "responsive design?" But when you dig deeper, the cracks really start to appear.

First, let's consider why people use smartphones in the first place. When the Pew Internet and American Life Project looked into the topic, the answers weren't all that surprising. Regardless of age, text messaging, internet use, email, video, and music were some of the main reasons along with, of course, voice and video calls. When asked why they turned to their phones, "avoid being bored" was again the top choice, though younger (18-29) people were much more likely (93%) to admit to using the phone to entertain themselves than people over 50 (55%). Younger people also used their phones to escape their current circumstances more than older folks: 47% of 18-29 year olds admitted they used their phones to "avoid others," while only 15% of the 50+ group said the same thing.

Microsoft's study dug a little deeper into the issue. They found that simultaneous screen use could be classified into four categories:

1. Content Grazing (68% of respondents): Engaging in behavior to distract themselves. **2. Investigative Spider Webbing** (57% of *respondents*): Simultaneous usage for gathering information on a topic or discovering new things (e.g. Researching actors on IMDB.com while watching a movie).

3. Social Spider Webbing (*39% of respondents*): Connecting and sharing with others while doing something else.

4. Quantum usage (*46% of respondents*): "Sequential, content-based" browsing moving from one link to another.

The "social" aspect of simultaneous screen usage bears special mention because it seems to be something that spurs a lot of simultaneous screen usage, though what kind of "social" depends on what's being watched and when the consumer is reacting to it. A study by ShareThis (reported on ClickZ.com) found that Twitter usage in particular spiked during live events while reddit usage peaked immediately after the event.

This finding offers yet another insight into simultaneous screen usage: usage seems to match the characteristics of the channel. Twitter, with it's rapid-fire format of 140 character messages lends itself well to simultaneous usage while reddit, a social network that looks a lot more like old school discussion boards that lends itself more to longer posts requiring more time (and thought) to write than a Tweet, is more reflective and conversational...appropriate for post-event wrap-ups and debates about the outcome of a live event. The "social" aspect of simultaneous screen usage bears special mention because it seems to be something that spurs a lot of simultaneous screen usage, though what kind of "social" depends on what's being watched and when the consumer is reacting to it. A study by ShareThis (reported on ClickZ.com) found that Twitter usage in particular spiked during live events while reddit usage peaked immediately after the event. This finding offers yet another insight into simultaneous screen usage: usage seems to match the characteristics of the channel. Twitter, with it's rapid-fire format of 140 character messages lends itself well to simultaneous usage while reddit, a social network that looks a lot more like old school discussion boards that lends itself more to longer posts requiring more time (and thought) to write than a Tweet, is more reflective and conversational...appropriate for post-event wrap-ups and debates about the outcome of a live event.

The Four Dimensions of the Multi-screen Universe.

If all this sounds scary, frankly that's because it is. This is virgin territory, terra incognita, unknown and unmapped. We're all pioneers in the multi-screen universe.

But just because it's new doesn't mean that it's impossible to begin to navigate our way through it. In the physical world, understanding where you are and where you want to go depends on understanding where we are in relationship to the 4 dimensions of space-time: width (X), height (Y), depth (Z), and time (t). If we know the values of these four dimensions, we know where (and when) we are. Navigating the multi-screen universe requires knowing four dimensions as well: audience (who), intention (why), context (where or when), and device (what). If we can understand who we're trying to communicate with, why they might be doing what they're doing, where (and/or when) they are, and what type of device they're using, we can craft the most effective message to reach them at their location in the multi-screen universe of today.

Dimension 1: Audience

This isn't new to anyone. If we're going to have a chance of creating effective

communication, we have to know who we're trying to communicate with. It's pretty clear from the research on screen usage that factors such as age, socio-economic status, gender, and ethnicity are big factors when it comes to what screens people are using and when. For some—particularly younger, non-white people with low incomes and low levels of educational attainment—their portal to the digital world is most likely the smartphone, according to Pew. More affluent people might be more likely to have more screens available to them, but usage seems to correspond more to age than anything else. Age also has a major impact on the second dimension we need to look at: intent.

Dimension 2: Intention

Intention, why someone is using a particular device, has a big impact on where they are in the multi-screen universe. If they're engaged in researching products and/or services, if they're creating content other than photographs or video, if they're working, chances are that they're using a desktop or laptop computer. These devices, with their multiple inputs (mouse, keyboard), large screens, and high storage volumes lend themselves to these kinds of activities. On the other hand, if they're commenting on a movie they're watching, entertaining themselves while waiting in line, trying to navigate their physical space, or documenting their travels, chances are they're using a device such as a smartphone or tablet.

Dimension 3: Context

Context, where someone is (or under what circumstances they find themselves in) also influences what people do and what screen they choose to pay attention to. If they're a teenager stuck watching the news with Grandma, chances are they'll be on their phone as soon as they can sneak it out. If they're at work (and actually working), chances are they'll be on a desktop or laptop machine. Context changes everything when it comes to selecting the screen we choose to use (if we have a choice).

Dimension 4: Device

Finally, the characteristics of the device they're using influence their behavior. Smartphones, due to their portability, always-on data connection, and the fact that they become, over time, very personal devices (Microsoft's report uses the Jungian archetype of "The Lover" to characterize the position smartphones play in our lives) lend themselves to frequent usage over the course of a day as a connector, boredom-killer, on-the-spot advisor, and navigator. On the other hand, laptop and desktop computers function as tools of creation, portals to information, crunchers of numbers, and organizers of all the information we collect throughout our lives (Microsoft assigns them to the Jungian archetype of "The Sage"). Tablets are somewhere in-between, performing many of the functions reserved for laptops and desktops but in a personal way more akin to a smartphone.

Targerting in the Multi-Screen Universe.

Once we identify the values of the four dimensions that locate a target in the multiscreen universe—**who, why, where, and wha**t we can use those coordinates to develop communications that work best for that target.

Here's an example: we want to reach kids between 16-18 who are searching for colleges. With those two dimensions—who and why—we can infer context— they're probably at home and device—they're probably using a laptop or desktop computer. Why? Because they need to research large amounts of information and organize it so they can refer back to it later. We can assume that they're at home, because research shows us that if they're out and about, they're probably using their smartphones to access the Internet.

So let's take a test:

Audience: prospective students between 16-18 who are interested in attending college.

Intention: they want to pick a college that's right for them.

Context: in their home (or primary domicile) focused on searching

Device: laptop or desktop, either in their bedroom or in a public area in the home

So what do we do with this information? First, we know who we're trying to reach, so we should use what we know about our audience to craft our message. Next, since they're engaged in a search, perhaps we should use paid search or listings on college ranking web sites. If they're at home, they probably have time to read more information than they would if they were reading off their phone and they probably have some older adults they need to share this information with. Finally, if they're using a laptop or a desktop machine, it means that they are probably using a device with more computing power and a larger screen than a tablet or smartphone, allowing them access to more processor-intensive, immersive experiences such as high definition video or graphically-intense interactive experiences (e.g. virtual tours of a campus).

On the other hand, let's say that the same prospective student has chosen a set of schools to visit and they're on their way to campus for the first time. Knowing that, we can probably assume that they're in the process of traveling and that they're probably using a smartphone (or, possibly a tablet with a cellular data connection).

Audience: prospective students between 16-18 who have developed a "short list" of schools to visit.

Intention: they want to pick a college that's right for them.

Context: traveling to campus for a visit

Device: probably a smartphone, though possibly a tablet with a cellular data connection

In this case, what our audience needs is information in small chunks that's going to help them get where they're going, find who they're supposed to meet with, navigate around campus and the surrounding area, and maybe share what they're doing with their friends and family. In this case an app or a welldone responsive site optimized for someone with an immediate need for navigational and contextual information on a small screen would be the most effective means of communication. You don't need to grab their attention at this point. You need to convert them from "prospective student" to "applicant."

Ad Astra Per Aspera.

In Latin, "ad astra per aspera" translates roughly as "to the stars through difficulties" or "a rough road leads to the stars." In either case, basically it's an inspirational phrase that tells us that to reach the heavens, we're going to have to put up with a lot of tough stuff.

We're just beginning to navigate the unknown lands of the multi-screen universe, and it's not going to be easy. Considering that the first generation iPhone was released in 2007 and the first generation iPad was launched in 2010, it's clear that we're just now at the very early stages of understanding the impact that these now nearly ubiquitous devices are going to have on communication, entertainment, and even our culture. Is the rise of personal communications devices that allow us to be connected to our friends 24/7 going to change the way we relate to each other in person? Is the fact that everyone in the family can now curl up with their own personal entertainment device instead of gathering around the television (the "hearth" of the 20th and early 21st centuries) going to have a negative impact on family cohesion? Will the ability to transmit a continuous stream of real-time information about what we're doing to friends, families, and strangers going to change how we navigate and relate to the world (see Periscope)? And what will happen to the first generation who grows up with the world moderated through all these screens?

It's impossible to tell. But it's not impossible to start mapping out this unknown territory.

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