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"It is now evident that the possibilities through mobile technology are tremendous. It takes a cleverly crafted persuasion strategy to leverage this unique opportunity.

"There are many steps to building a persuasion strategy and, like a typical design process, it starts with understanding the customer."

While building for the mobile channel, designers strive to overcome the fragmented mobile medium. They also aim to reduce the number of clicks, make a shallow architecture, design appropriately for touch screens, plan a layout for a smaller screen size, etc.

The focus is on ensuring classic usability through ease of use, fluid navigation, and simpler presentation.

Customers will not buy your product just because the navigation is easy.

Though this is a great start to ensure that your customers "CAN DO" the task you want them to do, it does not guarantee that they "WILL DO" them. Customers will not buy your product just because the navigation is easy.

This is where the science of persuasion engineering becomes relevant. Through the study of influence focused on human-computer interaction, we know that computing devices have tremendous potential to persuade. If the experience is designed using motivational principles, these devices will motivate our customers and drive conversion.

Finding the right technique to persuade your customers is a challenge. It involves getting a deeper understanding of their drives, blocks, beliefs, and feelings. Add this to an ecosystemic understanding of how they are using their mobile devices, and you have a powerful technique to engage and persuade them.

#### **Typical Persuasion Mistakes**

Are companies able to engage and persuade their customers effectively? Well, let's look at some of the typical techniques that are employed by companies.

#### Generic Banner Advertisements

One of the ways that companies attempt to persuade customers on the mobile channel is through banner advertisements. Designers employ thin 60-pixel high banner advertisements on the mobile interface.







Though banner advertisements are arguably somewhat successful on desktop browser websites, they are an absolute nightmare when it comes to the mobile channel. Not only are these banners ignored, but in an already limited size screen they irritate customers. This is a big waste of extremely precious mobile real estate.

Pushing banners into the mobile user's work stream can be irritating.

A study conducted by YouGov in the UK found out that banner ads on mobile phones are the worst offenders when it comes to pushing ads to customers. Here are some findings from the research:

"88 percent of smartphone users ignore ads in apps, 86 percent ignore ads on the mobile web, and 79 percent said ads on their mobile devices are irritating." Source



Advertisements work differently on the mobile channel because, unlike television or desktop computers (mostly used for entertainment and leisure), mobile devices are used typically as part of the user's work stream. While at leisure, users have more tolerance for interruptive advertising. While watching a movie on your television, lying on your couch, you don't mind a few advertisements that interrupt the flow of your viewing.

In the mobile context, users have little time to leverage the mobile device to get their work done. They are trying to pay their bills, find a restaurant, arrange a meeting, etc. Pushing banners into the user's work stream can irritate users and seem pushy as they hinder and distract users from the task at hand.







Christopher Rollyson in a recent article published on mengonline.com talks about the danger with appearing "Pushy":

"I can't remember anyone ever telling me that s/he liked pushy salespeople because they are focused on themselves, not the customer, and interactive ads often come across this way. In a mobile context, advertisers are trying to show how their brands are relevant, or they are doing direct response which is especially irritating because the ad often links to a bandwidth hogging screen. It interrupts." Source

Customers use mobile interfaces not for the additional functionality but for getting their core tasks done.

Companies need to prioritize user needs over advertising revenue, as mobile banner ads also tend to weaken customer trust. Banner ads showcasing generic offers and content seem salesy and make users feel that the site/app does not care about them.

A study conducted by the Nielsen group in Q3 2011 on the associated trust with different forms of advertisement discovered the following:

"Display ads (video or banner) on mobile devices such as tablets and smartphones are trusted by one-third of global respondents, which is slightly higher than the reported consumer trust level of text ads on mobile phones (29%). While the reported consumer trust level in mobile phone advertising is still low, it increased 61 percent since 2007 and 21 percent since 2009." Source

#### **Functionality Overload**

Mobile application stores are teeming and it is indeed a difficult task to get an application noticed by customers. Companies have started to believe that a functionality rich design would seem persuasive to their customers.

This is a false belief as customers do not use mobile interfaces for the additional functionality it might be providing but for the efficacy with which it allows them to get their core tasks done. A persuasive experience focuses on the core tasks that users care about and subtly persuades them in context.

Applications with a lot of features become heavier and often buggier. This affects the fluidity with which the user can work with the application. The just-in-case functionality is typically ignored by the user, and the poor response time associated with the functionality they want to use creates a non-conducive user experience.







Additional functionality also clutters the mobile real estate and poses a visual and cognitive load on the user. Resisting the urge to progressively increase the amount of features on your mobile application is important to ensure that the application remains focused and compelling over time and across version updates.

# Too many hues scattered across the interface create visual clutter.

#### **Candy Store**

Colors are a great way to communicate brand, aesthetic value, and the intent of the interface. Leveraging color effectively can visually engage the audience and create a desired visceral effect.

Research conducted by Shun Yin Lam explored "The Effects of Store Environment on Shopping Behaviors." Here are some interesting findings extracted from the research:

"93 percent of respondents stated that color was important to their purchase. A total of 85 percent stated that color was the reason for a purchase. Then, 80 percent agreed that the color of a brand represents consumer quality." Source

Though color is a powerful tool when used effectively, sometimes color use can go wrong. Companies often believe that the use of a menagerie of colors applied across the mobile interface would persuade users. Such interfaces have a variety of colors applied across icons and interface elements.

Too many hues scattered across the interface do not build persuasion but create visual clutter that makes it hard for users to find what they are looking for.













Persuasive use of colors requires an in-depth understanding of the target audience and how they relate to color. Careful use of a selective palette that is relevant to the target group can help build a persuasive interface and bring about a positive visceral effect.

Customers who accept push notifications from applications regret it later.

#### Flashy and Heavy Graphics

Another technique employed by companies is to overload their interface with flashy graphics. The belief is that flashy and heavy graphics would be equal to a persuasive interface. Though they might provide brief visual oomph to the user, they would fail to compel the customer to do more.

Graphics that are not designed keeping the customer in mind do not add significant value to the interface. In fact they add visual clutter that affects readability and reduces the customer's ability to easily find what they are looking for.







#### **Push Notifications**

A majority of customers do not allow push notifications to be sent to them via applications. The customers who accept push notifications from applications regret it later.

Adding up the push notifications from even five applications can mean that the user is being alerted every few minutes. The value and effect of such notifications is diminished over time and users develop "notification blindness." The typical response to a notification is to immediately close the message box.







Applications that push a barrage of notifications worsen the problem. It is important to understand that your notifications are not just competing with notifications from other applications but also with the user's workstream and the environment in which they use their mobile device.

"Your customers might be opening the messages, but are they being persuaded?"







#### Generic SMS Avalanche

I receive a multitude of SMS in a day from services asking me to buy things I do not need or want. Although I can turn them off, I keep them coming as it intrigues me to see how companies are attempting to persuade customers. Approximately 80% of SMS are about things I don't care about. They either stack up in my message inbox or get deleted immediately





ANSAL TRUST BE SAFE & BE SECURE New Tower Launchs at Sec-80, FBD 3 BHK Luxury Apartments Hurry! Only Few Units left For Best Deal Call 9212466644 PizzaHutDelivery launches iPan Pizzas@Rs29\*-a solid bite that's just rightICall 39883988/6009000 !\*Price for TakeAway Singles,Delivery in BoxOf4 @Rs140,T&CApply

Though SMS has its benefits with a "customer opening rate" as high as 90-95% and availability across all mobile phones, a ruthless barrage of generic SMS tend to turn customers off. Your customers might be opening the messages, but are they being persuaded? Source

Messages not designed to the specific needs of the targeted customer can start to lose meaning and be ignored over time.

#### Summary

Persuading through mobile phones is not about the technology prowess and capability to leverage SMS, notifications, etc. It is about the customer and his or her mobile needs.







"Mobile phone users associate with their devices at an emotional level. Companies can leverage this emotional connection."

Here is an extract from an article written by Dannielle Blumenthal (Ph.D, Adjunct Assistant Professor, Marketing Management & Innovation at the University of Maryland) about the challenge posed by a technology-centric mind set:

"I believe high-tech companies...are doing the world a big favor. I just wonder why they can't get their heads out of the geek bubble long enough to hire marketers who have studied psychology, sociology, anthropology, biology, economics, history, and other subjects that would help them to think out of the box about appealing to the actual consumer — who isn't normally a techie." Source

The above examples highlight some of the mistakes companies make. In the next section we look at some possibilities that arise from the mobile channel which can help build persuasion in the right way.

#### Mobile phones: User to device relationship

Researchers from across the world have been observing how mobile phone users behave with their devices. Here are some salient findings:

- ▶ The nature of mobile phone ownership is highly personal. *Wireless Works* by BBDO and *Proximity* reported in 2006 that 63% of the population will not share the phone even with their spouse.
- ▶ Users also tend to always keep their mobile devices on. 81% of youth aged 15 - 20 sleep with their mobile phone turned on. This has less to do with extended battery life of the device and more due to how users associate with their phones.
- ▶ Morgan Stanley reported in 2007 that 91% of mobile phone owners worldwide keep the phone within 3 feet, day and night, 24 hours per day, including when we sleep. Some carry them to the bathroom as well.
- ▶ Nokia researcher Jan Chipchase mentioned that we tend to always carry mobile phones with us because "Mobile phones provide survival for us and survival for our loved ones."

These are some odd behaviors displayed by mobile users and many more have been documented. What this illustrates is that mobile phone users associate with their devices at an emotional level. Companies can leverage this emotional connection that their customers have with their devices.







Following are some ways in which the device to user relationship can be further developed and leveraged:

#### Context Aware

Mobile phones contain a myriad of inbuilt hardware such as GPS, accelerometers, Gyroscope, Light sensor, Magnetic sensor, etc. These sensorial faculties have the ability to measure the user's environment and determine the context of use with great accuracy. Persuading customers in a contextually relevant fashion can increase the chances of conversion.

A tour guide application built on the IVO framework leverages the user's context to guide them through a specific track.

"Users can be guided by the application to follow a certain path that goes through the main points of interest. Users are also free to walk around at their own will, receiving information regarding their surroundings. During the tours, users can as well engage in entertainment activities, such as quizzes or peddy-paper games. Peddy-paper is a leisure activity often linked to the acquisition of knowledge about a certain topic or place. The players have to follow a route while answering a quiz or completing tasks, corresponding to different intermediate points, which can determine the transition to the next part of the route." Source

#### Personal Diary of Secrets

Mobile phone users tend to spend a majority of their waking and sleeping hours with their device. As a communication, entertainment, and task enablement channel, mobile phones are used for almost everything. The amount of information that a mobile device captures about their users can be immense. In fact a mobile device on average would know more about its user than all their family and friends put together.

This provides a significant opportunity to persuade users through the vast tome of information we know about them. Through storing data about the customer over time, applications can build a pretty accurate picture of the customer's behavior.

"A mobile device on average would know more about its user than all their family and friends put together."







Another way could be through accessing data captured across applications. The challenge to overcome here is to gain access to content across applications.

The Windows 7 mobile platform attempts to provide for this form of access. The platform contains a UI metaphor called a "hub." A "hub" is an application which can aggregate relevant data from across applications and other sources. Each hub aggregates data belonging to a specific category such as people, photos, music, etc.

"Users do not see a mobile phone as a tool, but as an amalgamation of social actors which strive to service their every need."

#### A Social Actor

Technology users often tend to interact with their devices as if they were sentient. The anthropomorphism of technology has been prevalent across devices of varied interactivity.

Here is an extract from "Computers as persuasive social actors." It shows how we tend to react to devices that we interact with.

"Shortly after midnight, a resident of a small town in southern California called the police to report hearing a man inside a house nearby screaming 'I am going to kill you! I am going to kill you!' Officers arrived at the scene and ordered the screaming man to come out of the house. The man stepped out wearing shorts and a polo shirt. The officers found no victim inside the house. The man had been yelling at his computer." Source

This phenomenon is consistently true when it comes to mobile phones. Users do not see a mobile phone as a tool, but as an amalgamation of social actors which strive to service their every need.

In "Mobile Persuasion" B.J. Fogg and Dean Eckles talk about the three types of personas that a mobile phone personifies.

When users are looking for a restaurant or a parking place, or to book tickets, they expect their phone to act as a concierge. They expect the device to fulfill the desired task with the finesse of an accomplished human concierge who fluidly understands what they mean.







Standing in the train while going to work, they expect their phone to entertain them. Like a court jester constantly pushing different means of entertainment, users expect their phone to know a wide variety of tricks.

Users struggle to improve their diet, exercise routine, medicine intake and other such activities which demand discipline. They expect their phone to act as a coach, working with them constantly to help achieve their life goals.

A mobile phone is expected to act as a coach, working with a user to achieve life goals.

Though some mobile applications such as Nike+, Facebook and Yelp have managed to leverage the personas of these social actors, a complete substitution of the human connection does not seem to be currently possible.

Research conducted by Nokia explored how participants associate with their mobile phones. The experiment involved sending SMS from a human VS automated source to participants. Participants were required to reply to the questions within the SMS. The experiment revealed that people still trust a human actor more than technology intelligence. Source (PDF)

#### Gamification

Gamification is the new hot buzzword. It is based on the fact that everyone loves to play games. People play and so do animals and insects. Some say we play games to learn the social rules and skills which would help us in real life. The interesting part is that our brain gives us a squirt of dopamine as a reward for play.

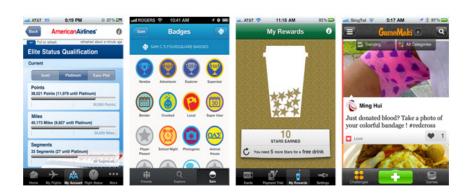
The endeavor through gamification is to leverage game rules and dynamics to make mundane work fun. Companies are excited by this possibility and are eager to have their customers or employees perform mundane tasks with pleasure.







Gamification has many challenges at the enterprise level, and it can fail.



Some of the mobile applications shown above are able to effectively leverage gamification principles to make their experience persuasive.

The challenge with implementing gamification at an enterprise level is manifold. Here are some examples of where gamification could fail.

#### Serious games are not fun

Gamifying is serious work in that users don't see it as a game. The task here is to magnify the game story aspect and reduce the work aspect of the game. Microsoft's "Ribbon Hero" lays such heavy stress on the overarching story that it diminishes the tutorial aspect of learning Microsoft office tools.

#### Cheaters always prosper

Enterprise applications which build on gamification run the risk of being "gamed." Gaming the system is where the players are able to fool the systems into awarding prizes they didn't earn. This is especially of concern where productivity or employee performance is being measured.

#### Nobody wants to be a loser

Building measurable competition within a team can be dangerous as the losing teammates can feel demotivated.

"Workplace studies have shown that carrot/stick motivators have only short-term positive effects, and often result in bitterness, feeling passed over and accusations of favoritism. We hear time and again 'we compete against our competitors, not ourselves.'" Source







#### How should companies build a mobile persuasion strategy?

It is now evident that the possibilities through mobile technology are tremendous. It takes a cleverly crafted persuasion strategy to leverage this unique opportunity.

There are many steps to building a persuasion strategy and, like a typical design process, it starts with understanding the customer.

Building a persuasion strategy starts with understanding the customer.

#### Understand the Customer

Understand the emotional drivers and blocks within the customer's mind. Try and determine what could push them to perform the action you want. Also, understand what might be stopping them. Customers also associate emotionally with their mobile devices. It is important to research this relationship the customers share with their devices.

#### Understand the Ecosystem

Build a model of the customer's ecosystem. Identify channels, players, relationships, scenarios, needs and opportunities. This helps identify the role of the mobile device in relation to the customer's ecosystem. An understanding of the role helps determine if the issue at hand could even be solved through a mobile device.

#### **Understand Technology**

A deep understanding of the capabilities of the mobile device is also required. Is it a basic phone or a smartphone? Does it have a browser? Can it support flash, etc.? Remember that a mobile device is a super channel which integrates the capabilities of many other channels. With an understanding of the mobile device, it would be possible to determine the right modality to exploit.

#### Identify the Opportunity

Pulling together our understanding of the role of mobile devices in the customer's ecosystem, how they relate to their devices and the capabilities of the device, it is possible to identify the right opportunity to persuade your customers.







#### **Build the Strategy**

The right persuasion method or methods need to be selected. The methods need to be structured across the user's flow through your interface.

#### Test

Test the design with the customers to determine the effectiveness of the persuasion strategy. An in-depth interview can identify negative responses before release. But of course A:B testing is the only real measure of success.

## Conclusion

What is the potential of a powerful computer in your pocket? It will obviously provide new ways to access and consume content and functionality.

As it evolves, maybe it will surpass the bounds of Moore's Law and become a hyper-intelligent machine. It would change, constantly taking new forms and forming new meaning in human life. But will it become our friend, replace a family member, persuade us to take medicine, reduce weight, achieve our life goals, or buy a product or service?

Some of these questions are already being answered by cleverly designed persuasive software. The rest and more can be achieved through application of persuasion engineering methodology. It takes a careful balance of device capabilities and a persuasion strategy to get mobile persuasion right!

### References

Still wondering about "Persuasion Strategy?" HFI's PET (Persuasion, Emotion and Trust) methodology provides the complete framework for building a persuasion strategy. To get a quick preview of the steps involved, watch this video.

The PET Design course and the PET Architect course offered by HFI provide a much deeper understanding of the process, and provide the complete details of how to build your very own persuasion strategy.

Shun Yin Lam (2001), *The Effects of Store Environment on Shopping Behaviors: A Critical Review*, in Advances in Consumer Research Volume 28, eds. Mary C. Gilly and Joan Meyers-Levy, Advances in Consumer Research Volume 28: Association for Consumer Research, Pages: 190-197.







# **About Amber**



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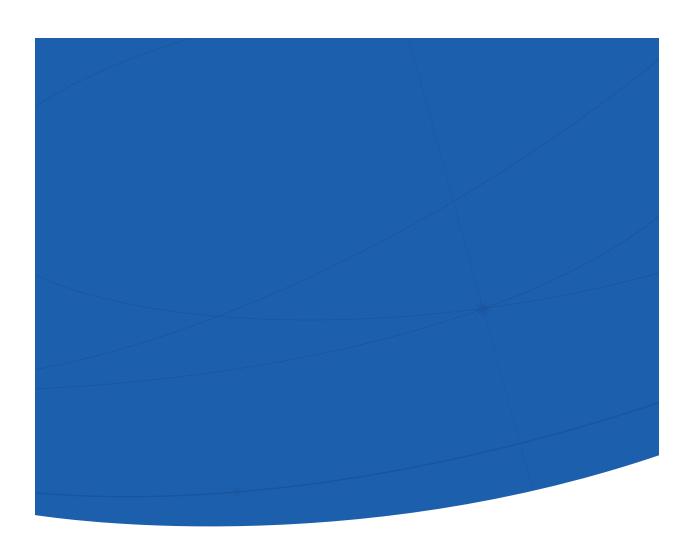
Amber Krishan leads project teams across digital strategy, usability evaluation, user interface structure design, and usability testing engagements. He has consulted with numerous domestic and international clients. He is also a lead instructor and teaches HFI's desktop and mobile UI design courses internationally.

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