4.1 INTRODUCTION

We spend much of our time in finding the trustworthiness in our day-to-day lives while doing tasks. We continually assess trustworthiness in both the people that we meet as well as in the products and services that we choose to interact with. In assessing that trustworthiness, researchers have found that the following three components come into play most of the time (Albrechtslund, 2007):

- **Integrity**: to do the task with the best intentions by heart
- **Competence**: to handle the task and the associated challenges
- **Capability**: to deliver timely outcomes and the expected level of finish
These three fundamentals are applied to both people and products having the same results. Since these fundamentals form the decisions users are making on a day-to-day basis, they can be considered when applying gamification design to generate experiences that our users recognize as trustworthy enough to interact with. Producing this trustworthiness implies that users will feel confident when it comes to sharing their data with businesses and it allows them to use that data to create more value for them (Kahneman, 2011).

At heart, the experiences must retort sustainably to the user needs. Those requirements may not always be recognized or articulated openly by the users themselves—it is, after all, the task and responsibility of the user experience practitioners to expose and innovate for the unspoken needs—but the design must also be aligned with an essentially wholesome, positive outcome (Pawlowski, 2017).

However, the dark patterns, on the other hand, are not errors. They’re prudently made with a solid understanding of the human psychology, and they usually don’t consider the user’s interest. Dark patterns have been part of our lives for decades without most people knowing; be it about a weight loss medicine that is sold with the slogan of “reduce 10 kg in a week,” or some credit card statements claiming a 0% balance transfer but don’t clarify that this percentage will rise way higher unless the consumer chooses to have a long-term agreement. It is of no surprise that dark patterns have made their way into gamification contexts as well (Leavitt & Shneiderman, 2006).

As known, gamification is the use of visuals and design components from games in non-gaming contexts to enhance user engagement and motivate users to change their behavior. Hence, user engagement and motivation are the key outcomes of gameful system design (O’Brien & Toms, 2008). In our context, user engagement is an active relationship between a consumer and a product or service, with engagement measured with metrics of recency, frequency, duration, virality and ratings. Metrics from these categories can be used to form an “E-score” (i.e. engagement score), which is a single number defining the level of user engagement (Zichermann & Cunningham, 2011). Engagement also has a strong relationship with user experience, since it reinforces affective meaning, interaction, feedback and user control, which culminates in a positive user experience. However, gamification faces a big challenge since it is very difficult to maintain long-term relationships with users; i.e. “keeping
engagement levels high” is hard but is achievable through positive reinforcements and actions towards mastery (Deterding, 2011).

With this in mind, the darkness could quickly make its place since the User eXperience (UX) design choices are being chosen to be intentionally deceptive (Bardzell & Bardzell, 2013). To urge the user to give up somewhat more than they realize. Or to agree to things they perhaps wouldn’t if they honestly understood the decisions they were being urged to make. To put it simply, dark pattern design is dishonesty and deceitfulness by design.

The technique, as it is online today, frequently feeds off and gains the fact that content-overloaded customers skim-read stuff they’re provided with, particularly if it looks dull and they’re in the middle of trying to do something else—such as sign up to their desired service, complete their purchase, reach to something they want to look at or know what their friends have sent them (Fogg, 2009).

Manipulative timing is a vital component of dark pattern design (Benford et al., 2015). For example, when you see a notice, you can control how you respond to it. Or if you even notice it. Pauses usually pile on the cognitive overload—while the deceptive design uses them to make it more difficult for a web user to be completely in control of their abilities during an important moment of decision.

In terms of visuals, brightly colored “agree and continue” buttons are a recurring feature of this flavor of dark pattern design. These eye-catching signposts appear near universally across consent flows—to encourage users not to read or contemplate a service’s terms and conditions, and therefore not to understand what they’re agreeing to.

This often works because humans are lazy in the face of boring and/or complex looking material. And because too much information easily overwhelms. Most people will take the path of least resistance. Especially if it’s being reassuringly plated up for them in handy, push-button form. At the same time, dark pattern design will ensure the opt out—if there is one—will be near invisible; Greyscale text on a grey background is the usual choice (Seaborne, & Fels, 2015). Some deceptive designs even include a call to action displayed on the colorful button they do want you to press—with text that says something like “Okay, looks great!”—to further push a decision. Likewise, the less visible opt out option might use a negative suggestion to imply you’re going to miss out on something or are risking bad stuff happening by clicking there (Wyie, 2014).
4.2 RELATED WORK

To better understand gamification design, we need to better grasp game design. It has been more than 30 years since the initial voices were heard concerning the lack of a critical language for examining and speaking about game design (Costikyan, 1994). Scholars and design practitioners have since replied to that call by suggesting ways of understanding games, categorizing them, criticizing them and more. Hunicke et al. (2004) proposed a framework for understanding games and reducing the gap “between game design and the development, game criticism, and practical game research,” while Zagal et al. (2005) developed an ontology for telling, examining and reviewing games, by defining a ladder of concepts abstracted from the analysis of numerous specific games.

In 2010, Bergström et al. proposed using the game design patterns to ratify and codify knowledge for game aesthetics. This idea was widened by Björk and Holopainen (2005), who developed a group of almost 300 gameplay patterns. These patterns vary from the original structure in building by replacing the problem solution pairs with the cause and consequences groups that label possibilities for the instantiation of a pattern and the possible consequences that pattern might have in a game design.

A negative experience may encompass not only the game-like experience; it can include something one experiences after the gamified experience due to its design. Even so, this definition quickly runs into problems: it ignores the will and desires of the user (Eşanu, 2019).

The users’ prospects and understanding of the experience are maybe more important than if the experience was positive or negative. If we consider the interaction with a system as a contract, where a system offers one thing, but then provides another that the user was not aware of, such a contract would be problematic, and would be considered by society as unethical or illegal, even if the intentions and outcomes were well-meaning (Deterding, 2011).

4.3 GAMIFICATION FOR WORSE

4.3.1 Privacy

Gamification designers commonly use their knowledge of cognitive psychology and usability to design the best experience for you as possible. However, they sometimes also apply their understanding of psychological biases to create UX that herd and misdirect you to take a path or decision you didn’t mean to intend for. Instead of designing with the users’
best interests at heart, they design for their business’ goals, whether that is more sales, more data or more subscribed users (Fogg, 2009). These dark patterns are ethically problematic since they nudge you towards particular choices and actions that may be against your own interest. They take your agency away without you knowing. For instance, in most of the cookie consent banner used by companies, we see that they highlighted the text “Trust and transparency is important to us” in bold letters and hyperlinked a few keywords with blue font. Users who do not read the block of text carefully will miss that “by continuing to use the site, including closing or clicking off the banner, you consent to the use of advertising and analytics technologies” (Jeffrey & Shaowen, 2015).

Note as well the usage of visuals in the consent form, which is meant to trigger users to click the most prominent button in order to continue quickly onto the site compared with the sparse “Learn More” option, which also is passively worded. The imbalance of visual representation between the options is a dark pattern meant to dissuade you from noticing the Learn More button. Once you click the Learn More button, you will often find that your privacy settings are set to the least privacy-friendly settings.

Another example of using formatting as a dark pattern is the invisible unsubscribe option. Companies bury the option in a jumble of text at the bottom of the page or format it to make it look like it’s not a link.

The importance of visual design and communication is paramount in any interface’s effectiveness and functionality. Through formatting text fonts, buttons and color blocks, gamification designers can trigger the desirable action from the user, directly or through learned associations. For some businesses, more clicks mean more money, so the right visual cues are key (Harry, Marc, Jeremy, & James, 2015).

Gamification designers by using visual cues could easily gain access to an excess of user data without informing, empowering and enabling the people they served as customers to make choices. In fact, data sharing activities were deliberately “designed away.” With time, these kinds of activities established a power imbalance. The companies who controlled the data had (and still have) the power (Zichermann & Cunningham, 2011).

4.3.2 Dependency

With regards to apps usage, there is a lifecycle of each app that must be noted. At the end of the lifecycle, there may be no more need for the app; however, creating user dependency through dark patterns in the UX
design of the app, a user may still be compelled to use the app even after he/she no longer is in need to use the app (Dicheva, Agre, & Angelova, 2015). For instance, if you are on track after following a strict gym routine for months, after adopting the gym mode or fitness related app, is the app still needed to continue the same routine or lifestyle? Here is when the context matters and to manipulate the context, to keep the app under constant usage, dark patterns in gamified UX design of the app are applied.

However, context can dynamically change user experience and increase app engagement by reminding users when they are able to make a smart health decision and by using “gym mode” to get the app ready for a user's workout as they are entering the gym (Adkins, 2016).

4.3.3 Exploitation

Gamification design can exploit the lack of user understanding and especially play with their psyche. There is an increasing interest in applying the insights and results from psychology and behavioral economics from games. How can we make a line between using this knowledge to deliver more interesting, engaging and satisfying the gamified experiences (good) and misusing player’s cognitive biases and probably irrational behavior to make more money? (Achterbosch, Pierce, & Simmons, 2007).

The psychologist Madigan’s analysis (2012) of the Sims game identifies several “psychological shenanigans” that have been leveraged to encourage people to spend more time and money on the game. The implication is that the player is being manipulated towards spending money they would not have otherwise.

The case for pop-ups is similar. It’s a common situation in case of pop-ups with confirmations. You read, and you don’t know whether to press OK or CANCEL—both seem to fit. Problems also occur with ambiguous checkboxes during payments and subscriptions (Madigan, 2012).

Another approach is the roach motel business model. A user wants to say goodbye, but it is not easy to do so. This happens, for instance, after you signed up to an app, but then getting out of it is hard to figure out. You are suddenly not given an easy way to cancel the automatic renewal (Montola, 2010).

For instance, some companies are using the above trick to convert their leads to paying customers. They make it so easy to sign up for an account, make the fine prints unnoticeable. Everything is aligned to the laws. The worst part is—they make it difficult for their users to terminate
the subscription. Some companies also sell their products in a bundle without offering the separate purchase option. Their customers are forced to buy the extra items or services because they are part of the deal (Agnieszka, 2019).

4.4 OPEN QUESTIONS ON GAMIFICATION

The dark patterns in UX gamified design are based on how the users behave and then exploiting the user behavior. Now you have read some of the examples of dark pattern design, apart from not repeating the above design, what else can you do to ensure that your design is ethical? The answer is simple—ask yourself why you design the product or feature in that way, how you collect data and why do you need the user data and so on. If your true answer is something like giving your users a more meaningful user experience—you are a designer with great ethic. What makes a designer good is not about how much money a designer brings to a business, it’s about how much a designer cares about the users. Thus, we pose the following questions:

• What is the motive of using dark patterns in gamified UX design besides user engagement and dependency?

• If the user engagement is achieved, what are the adverse effects dark patterns in gamified UX design may bring to the users?

• Is it possible to obtain user engagement and behavioral change without using dark patterns in gamified UX design?

• Even if users are aware of the deceptive UX patterns in a gamified design, why don’t they tend to avoid it?

• How can designers create gamified UX design that both provides access to marginalized users and brings them opportunities to engage?

• How do the demographic factors like language, age, gender, income, lifestyle and so on affect the engagement level in a gamified UX design and how do designers apply dark patterns to each group?

• While creating strategies for your gamification design, what protective tools are put in place to provide user engagement without compromising on regulatory compliances and design ethics?
4.5 CONCLUSION

Dark gamified design patterns use all of the powers of visual design with the flair of a magician’s misdirection, and the language of a shady sideshow Barker. These patterns are in direct opposition to concepts we celebrate in design, such as empathy, human-centered and inclusive. Dark patterns rob users of their agency (Davis, 2009). If users feel cheated by dark patterns, why do these patterns persist? Dark patterns emphasize short-term gains and offenders include some of the world’s biggest brands. A successful project is one that covers both aspects of increasing engagement through pleasurable activity and satisfying the bigger picture—the original purpose for the design (Hunicke, LeBlanc & Zubek, 2004). Overall, gamification is a game-logic design “weaved” carefully into a system to encourage behavioral change, not to manipulate user behavior. Good design—and a great company—is all about giving meaningfulness to our fellow humans. In fact, it’s not really limited to a company—it’s society as a whole. At the end of the day, you should evaluate what you really want from your customers. Do you just want them to use your service or do you want more? A good brand is liked. A great brand is loved and respected. You’ll probably never reach that point if you use dark patterns.

REFERENCES


