Designing Mindfulness
How to make technology which takes care of the people who use it

A Mindfulness Everywhere Manifesto
This is a process journal which documents the research and development process behind Designing Mindfulness, and covers in detail the thinking which underpins the project.
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1 Introduction

Where this project is coming from, what it is trying to do, and why it is important.
Introduction

This is an exciting time to be a maker of mindfulness apps. Interest in meditation is at an all-time high and the principles and practices of mindfulness are being applied in a remarkably wide range of contexts. Conversations about and mental health are losing their stigma and the growth in popularity of mindfulness apps is part of an overall trend of people using accessible digital tools to self-manage their wellbeing. That’s the good news.

But as bullish as some of the mindfulness world may be about its potential, we have to face the stark reality that even the most popular mindfulness products are only ever going to be small scale relative to the overall landscape of mobile technology use overall. Therefore if the scope of mindfulness and technology is only ever understood to be that of either internal employee wellbeing programs and apps that explicitly train people in meditation then the impact will only ever be relatively limited. There is however a much bigger opportunity and is best summarised by the questions that led to our starting the Designing Mindfulness project in the first place: given that only a relatively small proportion of people will choose to use specialist mindfulness training products, what if we could take the principles and practices of mindfulness and wellbeing and build them into everything?

Currently, the general conversation about mental wellbeing and technology is relatively immature. Yes there are pockets of products which explicitly support wellbeing but the most common narrative is that mobile technology is bad for us - training us in distraction, stoking self-judgement, and causing anxiety and FOMO. This has led to the fashion of the digital detox where people spend periods of time away from devices. While these practices do have some value, as a solution digital detox is highly unsustainable and indeed regressive given that it leads to the further pathologization and demonization of mobile technologies, technologies which are increasingly central to our lifestyles, economies and societies.

Another way in which people advocate improving the relationship between mobile technology and wellbeing is to learn how to use our apps and our devices more ‘mindfully’. This too is a valuable approach and one that we have explored extensively, confident in there being many ways in which our technology use can be incorporated into a mindfulness practice. However these two approaches - both that of digital detox and of the mindful
use of technology - make it the user's problem. They imply that all the technology we use are broadly neutral and if we are addicted to them or they are causing us anxiety then that is our fault. This is simply not true.

It is certainly true that users are responsible for the content that they post to technologies such as messaging apps and social networks and in that sense those platforms are neutral. However where they are not neutral when it comes to attention. We live in an attention economy. Companies which seem to be search engines, news sites or platforms which connect us with other people are at their essence advertising companies, making money through the selling our attention to third parties. The most biggest mobile game companies succeed by making sure enough people are so addicted to their systems that they will pay whatever it takes to continue their experience.

Given that user attention is so valuable, ambitious companies looking to convert that attention into shareholder value will do everything they can to make sure they capture as much of it as possible and once it is caught, everything that they can to keep it trapped. Many of the world’s most popular apps therefore employ banks of psychologists, neuroscientists, behavioural scientists and other specialists in order to do just that. This is not neutral. The mindfulness tradition is based on the axiom that our wellbeing is directly affected by the nature of our attention. Therefore if you’re making an app that is part of today’s attention economy and you are not incorporating certain principles that consider a healthy state of mind, then you are at best ignoring the consequences of your product on the people who use it and at worst you are intentionally creating a product that is harming them.

Our hope is that established companies as well as new startups will start to consider the impact of their products on the mental wellbeing of the people who use their products with as much importance and urgency as the impact they have on the environment. We don’t think it’s ok to live in a world where our attention - and as a result, our mental wellbeing, is being kicked around, degraded, and written off as acceptable collateral damage of the digital economy.

But this has to be more than a nice idea, it has to be real and it has to be practical. That is why we initiated Designing Mindfulness which contains a range of principles, tools, provocations and frameworks to help start turning the tanker around.

We hope our work here resonates with you. And if it does do get in touch.
Synopsis

Through a series of research stages, this journal documents the process which led to the principles of Designing Mindfulness. Initially it looks at the models and thinking which inform the project as a whole. Through a series of case studies on attentional technologies, and a series of interviews with a range of experts and industry professionals, implicit mindfulness is broken down into its component parts, ultimately to be reassembled in a series of nine principles. Alongside each principle is a concept example of how such a principle might be applied in practice. These principles and concepts act as manifestations of a new attitude towards the consumer, and serve as guidelines for making respectful attentional products.
Current Situation

Outlining some of the key prevalent themes which are influencing the space which we are working in.

Wellbeing vs Digital

The current mainstream perception is that wellbeing and digital technology are mutually exclusive. Many of the classic mindfulness teachers who grew up in an era without consumer technology insist on renouncing technology. Meanwhile much of the rhetoric sits around ‘unplugging’ or ‘switching off’, the attitude often summarised by the phrase ‘Digital Detox’ which has embedded connotations that technology is toxic. In line with this, Protein’s recent survey reports “54% of respondents state that technology has made them less connected to the real world.” (Jacobs, 2016) The space between the Analogue and Digital worlds is perceived by many as a sort of, “black hole of experience,” while meanwhile, for a select few, this overlap holds expanding possibility, and is the key towards progression to a, “mature information society.” (Boag and Floridi, 2016)

Distributed Computing

Computing was initially dominated by Centralised networks, where many people would serve one mainframe computer. As consumer technology emerged and developed, we moved into the era of desktops, where the ratio was roughly one computer to one person. With the invention of the laptop and the smartphone this has changed, ushering in Decentralised networks, and taking us to a point where we are sitting on the brink of Ubiquitous computing. In an era of
Ubiquitous computing, we would expect to see many objects in our day to day life connected to the internet and possessing some kind of processing power — the popular term for this is the Internet of Things. With this movement towards Ubiquitous computing, the consideration of our interactions with the connected objects around us becomes paramount. As Amber Case states, “In a world like this, the way devices communicate with us is crucial. If we were to expand their numbers, but maintain our current standards of communication, we’d soon find ourselves—our entire world—buried under an indistinguishable pile of dialog boxes, pop-up boxed, push notifications and alarms.” (Case, 2015)

Perceptions of Technology

Currently Western Society’s prevailing attitude toward technology is still coloured by metaphors such as ‘Big Brother,’ and supported by the wealth of Science Fiction which portrays apocalyptic, or at least negative scenarios brought about by the progression of technology (Terminator, Ex-Machina, The Matrix, Her, to name a few). While this still appears to be the dominant attitude, (rhetoric on the consumers end primarily revolves around privacy and protection), we are moving towards a space where we view technology in a more progressive light, where the rhetoric pertains to sharing and connection, and where we see technology as something which supports and nurtures us — a ‘Big Mother’ (Dancy, 2015), as opposed to controlling us — a ‘Big Brother’.

Dark Pattern Awareness

We are entering a period, where people are becoming aware of the impact of good and bad UX on their actions, agency, and wellbeing. An example of this is the recent Perkins vs LinkedIn UX lawsuit, which resulted in LinkedIn compensating users a total of $13 million who were manipulated by the site’s deceptive UX in handing over their address books. While the payout could have been much higher if it had been proved that LinkedIn’s actions had caused mental anguish (Brownlee, 2015), this was still a significant benchmark as one of the first major UX lawsuits, and has certainly raised awareness of Dark UX Patterns. (Brignull, 2014).
2 Framework

Core models and thinking which will help you understand how Designing Mindfulness & its principles can fit into a company’s practice.
Our Scope - Attentional, Non-Explicit Products

The scope of this project is improving attentional, non-explicit products. This sounds overly jargon-y so let's break that down.

An attentional product is one where the vast majority of the time spent using it requires our attention. For example a news website is of course attentional but virtual private network software is not since once it's set up we don't constantly need to pay attention to it. Now to the non-explicit bit. In the context of wellbeing, an explicit product is one whose value proposition is explicitly about improving our wellbeing in some way. So a Fitbit is an explicit product. A meditation app like Buddhify is an explicit product. An attentional non-explicit product is therefore one which isn’t all about wellbeing but nonetheless due to it affecting our attention still has an impact upon our wellbeing. This is because of the mindfulness principle that the nature and quality of our attention has a direct impact on our wellbeing. Most common consumer products falls in this category including messaging and social media platforms, wearables, mobile devices, news sites, operating systems, mobile games, productivity, workplace applications, ‘Internet of Things devices’ and so on. The scope of this project is to improve the impact of these products on the wellbeing of the people who use them. Which is effectively everyone with some kind of computer, mobile or otherwise. Which is effectively everyone.
There will be some makers of products who for whatever reason simply do not wish to make the wellbeing of their users a priority or an active part of their overall practice. We however are optimistic and believe that many entrepreneurs and companies do what they do so as to improve the lives of the people who use their products and are therefore ready to include attention and mental wellbeing as a dimension of that motivation. We are also realistic. In practice, not every product can be improved to the point where it makes a net positive contribution to a user’s wellbeing. But every product can take action by doing what they can. For example if a product becomes aware that parts of it have a negative effect on wellbeing, where appropriate, it can take measures to turn them into being wellbeing-neutral. Likewise if part of a product is wellbeing-neutral, it can be developed into being wellbeing-positive. Companies and products which are already well-established who wish to incorporate Designing Mindfulness principles are likely to find that their ability to make a high positive impact is limited by legacy issues. However new products and new companies have the best opportunity since these principles can be embedded at an early stage. It is also worth noting that given that different components of a single product can sit in different parts of this negative/neutral/positive trajectory.
Defining Mindfulness

There are many ways in which to define mindfulness. We prefer to use two definitions, the specific and the general. The specific definition of mindfulness is knowing what is happening in your experience while it is happening, also known by some people as present-moment awareness. The word mindfulness however tends to also be used very broadly to cover the whole field of meditation which in some way uses this present-moment awareness. The second definition of mindfulness is therefore this more general one. The mindfulness-based meditation tradition is a whole family of different practices but what unites them all is three things: you are doing a technique, it involves your present-moment awareness and you’re doing it in order to improve your life in some way. So this is our general definition of mindfulness. You’re ‘doing meditation’ or ‘doing mindfulness’ when you are using some kind of awareness-based technique for some kind of positive outcome. One way of categorising these positive outcomes are embodiment, self-awareness, non-distraction, balance, kindness to yourself and kindness to others.

Mindfulness = Σ (Awareness + Intentional Technique + Target Outcome)
The Mind-Training Loop

Our general definition of mindfulness and meditation has three components: the attention of the person, a technique which uses that attention and the outcome the technique aims to achieve. In traditional mindfulness, all three of these elements are owned by the meditator, the person practising mindfulness. Utterly central to this whole project however is the insight that when someone is a user of an attentional product, the same three elements exist but this time two of them are owned by the maker of the product. Both the technique by which the user’s attention is being directed and changed is owned by the maker as is the result they want to achieve e.g. watch an advert, click a buy button. The only mindfulness element retained by the user is their attention but now it is being manipulated by the product. So while using general software is not meditation, since it shares these three elements it is still mind-training. But unlike meditation, now the user has highly limited (if any) control over attention, technique and outcome. The fact that this mind-training loop operates is the reason so many technologies are detrimental to the wellbeing of the people who use them. But because the elements of the loop can be changed, it is also the reason why it doesn’t have to be this way.

Conventional mindfulness

- Awareness, technique & outcome are all in the power of the individual

Attentional products

- Awareness is the individual’s but the technique and the desired outcome are now owned by the product
So far we have limited the discussion to be solely about products and users’ interaction with them. The Product - or what we make - is only however one part of three dimensions which Designing Mindfulness and its principles aim to address. Because just as important as what we make is how we make it and why we make it. How we make products is culture. If we were to limit our principles solely to the product then we would be ignoring how critical culture and the humans who make the product are to its impact.

The good news is that we currently live in a time where mindfulness is becoming popular as a tool within employee wellbeing and leadership development and so this project represents an opportunity to take that interest and let it break free from compartmentalization as a purely internal practice. Alongside product and culture, the third dimension is Mission. If your mission is to improve the lives of people then it feels sensible that attention and mental wellbeing be included as part of this.
Business Case

It might be easy to dismiss Designing Mindfulness and its principles as idealistic nonsense far removed from the commercial reality of today’s market and operating environment. But we believe that to do so will be both short-sighted and negligent. We see there being four primary drivers for companies starting to adopt Designing Mindfulness principles. The first is quality of user relationships. By applying these principles into your products, people will feel at best nourished and at worst not-frazzled by using your product you will be cultivating long-term sustainable relationships. Which are precious in a product marketplace where today’s massive hit app can be tomorrow’s graveyard.

The second is market positioning. People are becoming increasingly aware of these issues and will actively look to use wellbeing-neutral and wellbeing-positive products.

The third business case driver is attractiveness to talent. The talent marketplace has never been so competitive and a company which offers an understanding of wellbeing that runs through product, culture and mission will be highly attractive.

The final element of the business case for Designing Mindfulness and its principles is that it’s just the right thing to do and there are times when that is all we need to know to take action.
3 Principles

Outlines of the final principles for Designing Mindfulness, accompanied by practical examples and an overview of the research and insights which informed each principle.
01. **Value Human Attention**
   Recognise that your Attentional Products have an impact on the Human mind.

02. **Be Honest About Dark Patterns**
   Stop tricking your users, and make it easier for them to make their own choices.

03. **Respect Information Zones**
   Develop sustainable modes of communication between your products and users.

04. **Prioritise Quality**
   Focus on producing and encouraging high quality, distraction-free content.

05. **Discourage Addictive Usage**
   Stop cultivating FOMO as a way to establish and maintain unhealthy addictions.

06. **Provide Exit Points**
   Promote a calm experience by providing a sense of completion and giving users an option to disengage.

07. **Minimise Social Anxiety**
   Fix the design decisions which are making people feel bad about themselves.

08. **Establish Holistic Metrics**
   Create ways of measuring success which incorporate more than just the bottom line.

09. **Apply Principles Company Wide**
   Let every part of the organisation play a role in supporting wellbeing.
01. Attention

Recognise that any attention-based product impacts wellbeing.

Human attention is too often treated as the collateral damage in the race for driving sales and advertising revenue. It is important to recognise that the way you design your products has an impact on the human mind and thereby on mental wellbeing. Through assimilating a deep rooted respect for human attention into your organisation, and examining the impact of the design decisions you make through a user-centred process, you can then build attentional products that prioritise the facilitation of meaningful engagement between a user and your product or content.

Many attentional products are built with a disregard of the end user's mental wellbeing, and a lack of respect of how their attention is manipulated. This disregard can be either based on ignorance or worse-still deliberate cynicism. Manifestations of this attitude are commonplace; distracting advertising, intrusive notifications, irrelevant content. Through this project's case studies and engagements, we have however seen organisations and products which clearly do place value human attention.

Medium is a prime example of this. Medium has placed a high priority on readable typography and clean layouts, while also being completely transparent about how much time (attention) each article requires from you, with their ‘X min read’ labels. Likewise, features like ‘Do not Disturb’ settings as seen on Slack, demonstrate a respect of the user's attention. Often a well rounded user-centred approach can help designers empathize with their users on this level, and start seeing them as people who use their products, and not just users.

Products which value human attention have design teams which not only demonstrate an understanding of who uses their product, but also where they are using it, why they are using, when and how often they are using it, and what else they are doing at the time.
A company’s new joiner pack tells new hires how important it is to the organisation that their work does what it can to improve user wellbeing.
Be Honest About Dark Patterns

Stop tricking your users, and make it easier for them to make their own choices.

It is common practice to use so-called Dark Patterns as ways to boost profits, and trick users into completing actions they didn’t notice or mean to. Be aware of the interactions built into your products, talk openly about their ethics, and commit to reducing your dependencies on deception, instead building a positive relationship between your brand and your users. The causes of these ‘sneaky’ design decisions can be tackled at their root and if they are continued to be used, they are done so with intention and awareness of their impact rather than just everyone else is does.

“A Dark Pattern is a user interface that has been carefully crafted to trick users into doing things, such as buying insurance with their purchase or signing up for recurring bills.” (Brignull, 2010)

Dark Patterns are everywhere, and some cases have become the unquestioned status quo as designers exploit their user’s vulnerabilities in the race to hit targets and boost revenues. It is the practice of trying to trick or force people to do (or consume) something they hadn’t planned on, didn’t know they were doing, and/or didn’t want to do. Often they take the form of things like disguised ads, hidden costs, confusing tick boxes, and forced information disclosure. In many cases Dark Patterns are created very consciously, and are a symptom of companies failing to acknowledge or care about the difference between a user’s reasons for using something, and their business needs. For example (before the separation
A CTO explains to his non-technical colleagues how his design & development teams use dark patterns and where they can phase them out.

For example, Facebook users who were signing in to message their friends, would first be led into Facebook's bottomless news feed, before being able to click on the Messages link. In many cases whole business models rely on Dark Patterns — for instance disguised native advertising is a major income stream for many print, online or audio publications.
Respect Information Zones

Develop sustainable modes of communication between your products and users.

In a world which in which the quantity of digital interactions is growing exponentially, it is becoming increasingly important to consider the nature in which digital products impinge on our attention. To do so, we need to understand the different ‘zones’ to which information can be delivered, and when it is appropriate to deliver information to each zone. Ask questions like, ‘Is this important enough to interrupt the user?’ ‘Can this be delivered in a less intrusive manner, using, for example a sound, a sensation or subtle status change?’ and ‘Does this notification really need to be quantified?’ Information Zones can also be reflected through maintaining a good visual hierarchy across your product or platform, allowing an individual to act with more agency when deciding which pieces of information they want to engage with.

Currently we are being delivered an increasing amount of information every day, through consumption of online content, status updates, messages, or other forms of interaction. However this information is often not delivered to us appropriately, or in some cases respectfully. Companies know that when they interrupt people, they are much more likely to get their attention, however it is unsustainable to base a relationship between a user and a product on interactions like these. Within this project’s case studies, it was apparent that products such as Slack and Quartz App have considered this issue, and have make design decisions to deliver content to the user’s ‘peripherals’ as defined
An iOS modification replaces app icon badge notifications with increases in the font weight of app names for a less jarring homescreen view.

by Amber Case. Slack uses an array of different subtle techniques to communicate with you — toggling between bold and standard text, highlighting text boxes, small colourless notification markers — while Quartz allows you to set your own preferences for what you would like to be notified about, and how. Slack's desktop app also, does not quantify the number of unread messages on it’s notification badge, understanding that the number of unread messages is actually irrelevant, and as a result, avoiding the anxiety you might associate with a mountain of unread emails.
Prioritise Quality

Focus on producing and encouraging high quality, distraction-free content.

Place an emphasis on quality of content, not quantity. This can be done by creating systems which place a value on quality of user-generated content over quality, stripping back unnecessary and distracting ephemera, focussing on the key experience, and minimising distractions. Far too often the quantity available is far more than the average user can consume, in these situations consider whether such an overwhelming array of choices is actually useful.

Medium is a great example of this. Its algorithm promotes articles based on quality as opposed to sheer number of followers or recommendations, thereby relieving pressure on writers to keep producing content. This promotes quality and slows down the pace of the platform. A similar ethos is seen in Monument Valley, where a conscious decision was made to remove all unnecessary ephemera usually found in similar games (coins, gems, points, level ups) and instead focus on the core experience. Through prioritising quality, comes an innate value of that quality. This is apparent across Medium — their design decisions, to ensure that a post is not detracted from by distracting advertising, and that upon completing an article, the discussion surrounding the article is visually dominant over more content, are examples of this. Similarly Quartz App has a simplistic interface, resembling a messaging platform, ensuring there are no distractions from their content.
Adding a shortcut to your Likes as a 3D Touch option for Twitter app allows you to review favourite or unread items you’ve already curated.
Discourage Addictive Usage

Stop cultivating FOMO as a way to establish and maintain unhealthy addictions.

Since they are perceived as being good for business, addictive feedback systems are deliberately designed into everyday products. However, while these are often helpful in the short run, they do not foster a positive relationship between a user and a product and can be unsustainable in the long run. Addictions are often cultivated by unpredictability - a common technique known as variable reward - where something different happens every time you click. You don’t know what is waiting for you in your inbox, you don’t know which Pokemon are nearby at any one time. While variability and mystery can be authentic and integral parts of some products, be aware that they actively create unhealthy and unsustainable addictions, and mitigate these by creating experiences that are easier to manage and are more predictable.

There are many ways to create addiction with the most common one being the hook model articulated in Nir Eyal’s book Hooked. Most often it is some form of variable reward, or mysterious outcome that builds up a ‘Fear of Missing Out’ (FOMO), even if the likelihood of missing something important is very small, and keeps someone addicted to coming back, refreshing the page, and constantly checking for updates, in the hope that something new and amazing will appear — a sensation often compared to a Slot Machine. Variable rewards are consciously embedded in products because they are good for business, however in some cases they can function to the detriment of everyone, when a
Mindfulness Everywhere

By bundling notifications into longer periods of time such as 24 hours, users are not constantly being directed back into the app.

user is refreshing, or checking back so often that nothing is changing. A recent example can be seen with Pokemon GO, it’s huge drop off rate (in under a month the game lost over a third of it’s daily active users (Bloomberg)) is an example of a variable reward mechanic creating a sense of FOMO and a Slot Machine effect that was too unsustainable — many cite reasons such as ‘it was too distracting’, ‘I was spending too much time playing’ ‘I should spend my time doing something better’ as reasons for deleting the app. Mitigating such addictive patterns, by reducing unpredictability, should be a priority to ensure a sustainable relationship between your product and user.
Provide Exit Points

Promote a calm experience by providing a sense of completion and giving users an option to disengage.

Bottomless pits, infinite scrolls, and attention traps are all ways of attempting to keep a user in a product or an ecosystem against their explicit will or knowledge. Instead, provide exit points, focus on the finite, and not the infinite, and actually make experiences that have an endpoint. This way a user can disengage with a sense of completion and calm, instead of building an association between your product and time wasting.

There are many common techniques which are used to trap users’ attention within a product. A classic example is both Netflix’s and Youtube’s video queue systems which require a user to take action to avoid watching more content after their video/show/movie has finished. Similar mechanics can be seen on some news sites, or can be emulated will endless scrolling and bottomless pits. Within some of the larger platforms, such as Facebook, Twitter and Pinterest, we are almost seeing the emergence of separate internets, characterised as attention traps, their purpose to hold you in their own ecosystem. Pinterest for example, requires a lot of work on behalf of the user to find the source of the content visible on Pinterest. On mobile this is particularly apparent - clicking a link on Twitter will take you to their own browser, on which you can browse, but eventually you will be forced to return to twitter. For a user to really feel a sense of satisfaction, they need to feel a sense of completion — there needs to be an endpoint. Monument Valley is a great example of this — a game which like many others, could have easily chosen the route of near infinite levels, instead chose to package the whole experience into a roughly two hour long game (about the length of the film). In completing the game, a player has a sense of satisfaction, and therefore feels that they have got their money’s worth. Similarly Quartz App only has a certain number of stories (around 5 - 7) accessible at one moment in time. Once you have read them all, a ‘Your all caught up, come back later!’
This messaging feature allows a user to state for how long they are available to chat which is then ambiently displayed in the other user's header.

message pops up, providing the reader with a sense of completion which allows them to direct their full focus at another task.
Minimise Social Anxiety

Fix the design decisions which are making people feel bad about themselves.

As social creatures, we derive a great deal of self-worth from where we feel we fit into a community or social system. FOMO is the most commonly talked about example of how technology platforms encourage social anxiety but the feeling that everyone is better than us and that our lives are of relatively little value is just as significant. When technology is designed to mitigate this, at its best it can grow our sense of self-worth. And at the very least makers of products should aspire to not reducing it.

Social anxiety and psychological vulnerability is exploited, and sometimes even created by designers to boost engagement and dependency on a product. Social hierarchy is one of the most common ways of creating pressure and anxiety, and it forces people to try and live and communicate in ways that are unnatural to their individual sense of self, curating their online lives, and basing social interaction around superficial quantification - ‘how many likes will this post get’. Platforms, specifically social platforms, create hierarchies by boosting individual users to the point of celebrity, objects of aspiration, and suggesting that these individuals represent the life you should be living, the pictures you should be taking, the topics you should be interested in and the brands you should be buying. Through removing an emphasis on quantifying someone’s social status (likes, followers, friends) this can be mitigated. Medium, as previously mentioned, promotes content irregardless of no. of followers, thus reducing the celebrity effect. A classic example of psychological vulnerability occurs on Facebook, where when the average user changes their profile photo they are more vulnerable to social approval, so Facebook ranks new profile photos higher in the news feed to gain more likes, and thus bring the user back to the platform more
Presenting the positive impact of a user’s social actions can give them a sense of accomplishment and make them feel part of a wider movement.

Frequently to see who liked their photo. FOMO, or a fear of missing out, is another example of how social technologies support social anxiety. If your product does evoke FOMO then it is worthwhile exploring how it might also support security and gratitude for what is already here.
Establish Holistic Metrics

Create ways of measuring success which incorporate more than just the bottom line.

The majority of key product metrics ignore the quality and impact on wellbeing of user interactions. To make meaningful progress, it has also to be measurable progress where valid attention and wellbeing-focussed metrics are included as part of a company’s overall measurement framework.

Measurement matters. In a data-centric world, without having decent measurement and measurement systems, this idea of designing wellbeing into your product will remain just that, a nice idea. To move on from that, the key first step for any product or organisation genuinely interested in valuing the attention of its users is to create metrics to support assessment and improvement. The nature of specific metrics will be highly dependent the nature of the product and context in question.

Just as important as having metrics is how they are seen within the company. The companies who have the most success will be those that make a user wellbeing metric a primary performance indicator of overall success. In the last twenty five years we have seen the growth of triple-bottom line accounting, where environmental and social impact are measured alongside financial impact. The opportunity here is to bring human impact to the same level and one important factor in this will be the establishment of frameworks and measurement systems which are bigger than a single organisation against which standards can be set.
Internal metrics such as Burnout Rate and external metrics such as Wellbeing Revenue Ratio ensure that human impact is valued.
Apply Principles Company Wide

Let every part of the organisation play a role in supporting wellbeing.

All parts of your company in some way impact the design of your product. Consider how your internal culture, practices and ethos lead to the decisions and environments which affect what you make. Leadership, recruitment, corporate culture, investor relationships. Given their impact on how you do what you do, it is important to include these values and principles across these parts of the organisation as well.

These principles can and should be practiced across all areas of the company, from leadership, through design and diversity, through to investment. Firstly, it is important to be self aware of the company and it’s background. Often the mismatch between those who use a product and those who create a product is greatly felt — Anil Dash pins this on internet.org’s failure. Many Startups emerge from a situation of privilege, where founders have access to early ‘friend and family’ rounds of funding, or even simply are privileged through the connections they have through family or education. Therefore it is imperative to prioritise diversity within organisations, so as to be able to make more engaged and representative decisions. Beyond this, and focussing on leadership, as Irene Au suggests, clear and mindful leadership will have an effect across the company. Giving up attachment, and ego-based afflictions allow for difficult decisions to be made, regardless on their outcome on the individual. For example, Steve Jobs returning to Apple cut their product line from 350 product to 10 which at the time was an extremely unpopular choice. In a similar vein, such an impact can be seen with Ev Williams — a visible progression can be seen through Blogger, Twitter and Medium as a result of his maturing mindfulness practice. On the level of
The Mindful Business Canvas is an example of a tool to plan how different functions within your organisation can support wellbeing.

design, ego can play a similar role, encouraging designers to embed unnecessary features because they can, and not because it is necessary. If the design team is able to move beyond personal ego, and develop empathy, they will be much more able to develop products which cater to a user’s real needs. It is also important to recognise the impact that different ‘types of money’ can have on your goal, and to look for the ‘right kind of money’. Being backed by a group of investors that care about your core mission will allow a company to make empowered decisions.
4 Interviews

Interviews with experts in the field around the subject of technology, mindfulness, wellbeing and implicit and explicit products.
Mikey Siegel

Founder of Conscious Tech studio Biofluent Technologies, founder of the Consciousness Hacking movement and teacher at Stanford in the Wellness and Technology division

Mindfulness Everywhere: What are you working on at the moment?

Mikey: My main focus is, I guess, three main things: consciousness hacking — the global community focused in this area, a group-flow technology project — a technology platform that tries to support deep connection and creative flow in groups of people, and I’m teaching at Stanford — I started a division called Wellness and Technology. It’s focused on exploring this whole domain of transformative technology.

How do you define Transformative Technology?

Transformative technology is the broad blanket term to point to technology explicitly focused on psychological, emotional, and spiritual wellbeing.

And that is the domain in which the majority of your work sits?

Exactly. A lot of the work we’re doing is focused on helping to start it in the tech industry, get Silicon Valley rolling, get it rolling in academia. We needed just a blanket term for the whole space, kind of like ‘wearables’ is a term to cover a space. One of the things that we did was we had the Transformative Technology Conference last year, and there’s another one coming up this year. That’s the effort to carve out the domain within the tech industry.

“Transformative technology is the broad blanket term to point to technology explicitly focused on psychological, emotional and spiritual wellbeing”

How did you get into this in the first place?
I really started off as an engineer, and studied computer engineering and robotics, and didn’t really have any kind of contemplative background, and was always interested in that space. It wasn’t until I finished graduate school that I was really motivated just by my own suffering really to dive deep into the contemplative space. I ended up staying at a yoga for a few months, and doing meditation retreats, and that essentially has become a lifelong journey. It all started later in my life. Once I went down that road, it wasn’t a side hobby. It became pretty important and central. Over time, I began to see that the disparate parts of my life, the technology on one side and this inner contemplative search on the other side, that they actually could be not only complementing each other but that the merging of them was actually quite important. If we actually could find a way for technology to increasingly support wellbeing, or mindfulness, or flourishing, or awakening, whatever term you want to use, that that would be profoundly important for humankind.

Can you expand on what you mean by ‘merging’?

Yeah, totally. There’s a number of different angles on it. One angle is what I would call the – actually, I don’t have a great name for it – call it the ‘Transformative Technology Imperative.’ That’s about the idea that technology is becoming exponentially ubiquitous, right? It’s obvious, right? Compared to ten years ago, the amount that technology has infiltrated out lives is huge. In ten years from now, that’s going to increase exponentially. The next generation of children being born are not going to know a life without technology embedded into almost every aspect of it.

Then we also have this other understanding that technology deeply and profoundly influences our state of consciousness: what we think, how we feel, what we believe, what we do, our behaviour. It really molds and morphs nearly every aspect of our lives. If it’s going to be ubiquitous and it’s going to be deeply influencing us, then we’re left with a very profound question. That question is in what direction – according to what qualities or principles does that influence happen? What I would put forth is that if that influence does not move in a direction of expanded consciousness then – I don’t like to be a doomsday person, but literally we could perish as a species. We could just blow each other up, or something.

There’s that perspective. There’s another perspective which is related – they’re all connected to each other – this idea that there’s an inside-out approach to change, and that so many of the changes that we try to create in the world are what I would call outside in. It’s as if your mindfulness practice involved puffing up your meditation cushion, and telling your neighbours to be quiet, and repainting the walls to be a more soothing colour. You could keep doing all those things, and they might have some influence on your practice, but eventually, none of that will ultimately release you from the responsibility of entering into your own direct experience. We do that on a large scale. We’re trying to address global poverty, and hunger, and war-torn nations, and genocide, and all of these horrific things happening in the world. We go in there, and we’re trying to put out the fires. It needs to

“If influence does not move in the direction of expanded consciousness then we could perish as a species”
be done. It’s not that that should be stopped, but there is an inner cause as well, to all of those things. Those things also emerge from the mindset, and state of consciousness, and state of psychological development of the contributing human beings. I don’t know if you know the UNESCO Constitution from the UN, from the United Nations. The first line in it, it says that since wars begin in the minds of men, it’s in the minds of men that the defenses of peace must be constructed. There’s even a recognition at the level of the United Nations that you can’t hope to have world peace without changing the inner world of human beings.

Then the question of why technology? Technology seems to be one of the most universally accessible human constructs, more so than music, more so than food because people are highly charged culturally about what type of music you’re going to listen to or what type of food you’re going to eat, not to mention language, and belief, and all these kinds of things, whereas as far as I know, every single person on the planet is happy to use a cell phone. If you can make pointers to deep shifts in human consciousness as universally accessible as cell phones, then you have something incredibly powerful.

Society is very literate about music or very literate about food — we know why we like certain things, and we usually know what they do to us. Do you feel that people are at a stage where they understand or are starting to understand what technology does to them mentally?

Probably not, really. I think that people sense that technology’s not really supporting their wellbeing in a meaningful way. To be honest, I live in a bubble. In my bubble, that’s a pretty common sentiment that technology – people are obviously very attached to technology. They’re very addicted to using it in certain ways, but at the same time, there’s a tension. They have a tension with it. I think that they’re aware of that tension. My guess is, probably, the vast majority of people never really think about that.

A lot of the rhetoric around technology and mindfulness or technology and mental wellbeing is about unplugging or digital detoxing...

This is something that I’m clearly observing as well. I would almost split it into two camps. There’s the folks that are rejecting technology as the problem, there is a lot of truth there, which is what you’re talking about. Then there’s those on the opposite side, who is saying how can you utilize this for the purpose of actually benefiting people?

In my experience, and maybe I’m wrong, it doesn’t seem like you have people that are completely unfamiliar with any kind of contemplative practice that are promoting digital detox. Interestingly, the people that are not coming from a perspective of contemplative practice, when they promote digital detox, it actually is usually around physical exercise, which is interesting.

For example, I see a lot of stuff around digital detox which has to do with kids outside, getting kids to exercise, getting kids to play, this kind of thing. It’s almost like what your perspective of wellbeing is, that...
will be the perspective from which you reject the technology, right? If your perspective on wellbeing is getting outside and playing, then technology is acting against that, which it is in many ways. If your perspective on wellbeing is attentional training, or self-awareness, or embodiment, then technology is also getting in the way of that, and so that’s going to be your talking point. To put it simply, technology genuinely has an effect on attention that is not conducive to contemplative experience and self awareness. A lot of technology pulls attention into a conceptual information space. It supports a mental, mind-dominated experience. I can see why so many outspoken people that are interested in promoting mindfulness would have a harsh reaction to that.

**Do you feel that is a quality of technology itself or the way that technology has been designed?**

My perspective on technology is it’s really is a reflection of humanity. It’s a manifestation of the human creative impulse. It is actually inseparable from who and what we are culturally in a way that our reflection in the mirror is inseparable from us. The general sense is that technology is really a reflection of humanity, of who and what we are culturally. It’s a manifestation of our creative impulses. In that sense, technology can be anything. It has no inherent limitation, but it is a reflection of human culture. It’s limited. The way that it’s inherently limited is not through some kind of construct of whatever technology is. I don’t think it’s a thing. I think it’s more of a potentiality. The limitations of technology more come from human ingenuity, imagination, cultural biases, beliefs, cultural structures. That’s where the limits in technology come from.

**Are unhealthy technologies are designed the way they are as a reflection of dominant models in our society, such as capitalism?**

Short answer is yes. The longer answer is that technology is a product of a particular incredibly complex set of beliefs, and drives, and feedback systems, and conditioning, and all this stuff. Very much so our state of consciousness, our desires, these things are shaping the technology that gets produced. One of my major – I often use the phrase we are what we build, and we build what we are. We’re literally building ourselves into the technology. My sense is that in order to actually begin to build truly transformative technologies, it’s going to require a deep shift in the corporate, entrepreneurial, start-up culture from which those technologies are emerging.

**What kind of shift are you talking about?**

My sense is the degree to which the organizations can embody the type of experience it’s trying to bring into the world, that’s the degree to which it will actually be able to bring that experience. Really, what I’m pointing towards is organizational awakening in the same way that you might talk about individual awakening.

**What does organizational awakening look like?**

I don’t totally know. I think it’s something that’s emerging right now. There are some interesting pointers to it. There’s folks that talk about Teal Organizations or deliberately developmental organizations. I don’t know if you’re familiar with any of that stuff. There’s some great books out there. Generally speaking, what it looks like is, at
the organizational level – at the collective level of the organization, it’s the embodiment of higher states of collective consciousness but also higher states of development as it’s talked about through different folks, Integral or Spiral Dynamics folks, that talk about different stages of psychological development. In terms of organizations, the priority drift, the bottom line begins to involve things that aren’t just about money. They begin to involve things that have to do with human wellbeing and flourishing. Different types of priorities are placed around the state of consciousness and wellbeing of the people involved in the organization. The ethics begin to shift of the organization. The distribution of power begins to shift. Things become more decentralized. The marketing strategies begin to shift. Priorities of things like authenticity and honesty begin to shift. There’s a lot of things that begin to shift that would be quite familiar to us, probably, from just a notion of spiritual evolution.

I’m an optimist that this is already shifting. Deep change is happening in organizational culture in this direction. In the sense of what would it take, I have this view that it’s already happening in many ways. It just seems to be part of a larger global change that is occurring.

There’s lots of factors that are contributing to it. There seems to be a growing recognition of their relationship between the way people feel and the way that they work. I think people are beginning to understand that the more you can support someone’s wellbeing the more that they are a beneficial component to the organizational structure.

I guess my final question would be does – for industry on a major level to value user wellbeing, do you think that needs to come from the users, or do you think that will come from industry?

I think that it’s a dance between the two. It can’t just be one. I think it’s a larger collective shift. It requires a combination of there being that desire and demand on the user side, on the consumer side. It also requires that there be that creative design insight and ingenuity on the side of industry.
Designing Mindfulness

Adrian Hon
CEO and founder of Six to Start
co-creators of the most successful smartphone fitness game in the world, Zombies, Run! Author of A History of the Future in 100 Products.

Is there’s enough of a business case or there will be enough of a business case for products to exclusively sit within an implicit category?

There are games that effectively involve physical fitness. Pokemon Go is not a fitness game. They wouldn’t describe it as a fitness game, I think. It’s just a game, but of course people do get fit playing that.

If the people who make Pokemon Go have a list of priorities with their app, like ‘what do we want to achieve with this,’ physical fitness may be on that list, but number one on that list is making shit tons of money. Physical fitness is not the number one implicit or explicit goal. I think that’s the reality we’re looking at. Now if it was the number one priority, then I think it gets a little bit confused, and I don’t know if you actually are making a very successful app or not. I think you can. You can make an app that’s secretly for something else that’s good or bad for you, but I have to say in my experience, they don’t really work very well.

We used to have all this stuff where we used to work with the BBC and Channel 4 Education. Oh, let’s make educational games, so a game that’s fun that’s also secretly educational that the kids will play. Usually, they just end up being really shitty games. They’re neither fun nor educational, or they are educational but they’re not fun. It’s really hard to do two things at once, honestly. I think it’s really hard. I think that often the good effects of these games are inadvertent rather than you go into it thinking we’re going to make an educational game. There are certainly cases that were different. Here’s an example: World of Warcraft. World of Warcraft is just a massive multiplayer online game, but if you get to higher levels, you do need to learn an awful lot about communication, and team-building,
and that sort of thing. Now is World of Warcraft a game whose purpose is to foster communication and team-building? No, but at the same time, it probably is one of the best games at doing that, but it wasn’t made to do that. I think if it was made to do that, I don’t think it would’ve been a very good game because you would’ve been constantly thinking, how can we design this game in a way that will require communication and team-building.

Is demand for fitness and well-being products changing?

I mean, broadly speaking, yeah, clearly. I mean, demand appears to be growing across the board, at least digitally. Demand in the last three decades has been pretty high in health and well-being products. Gyms and health foods and things like that, and of course meditation apps, mindfulness apps, those are big business now to things like FitBit to fitness apparel. Yeah, people are more interested and they’re spending more money there.

Do you think this is a generational thing?

I don’t know enough about where the spending is coming from. I feel like people really invested in fitness during effectively the Baby Boomer generation when they started hitting 40 or 50. For me almost, it’s the effect of jogging as a phenomenon. Really the 80s and the 90s is when people really started spending a lot of money on this. It used to be historically, the idea that people go out running was just crazy. Why would you do that? It’s just not a thing that you do. When people started jogging in the 80s, people really made fun of them. I wouldn’t say it’s the Millennials or Generation Y who are invested in the idea of fitness, but I think that digital fitness, that’s certainly a new spin on it.

Why has physical fitness been so successful in a digital context compared to mental wellbeing?

I think a large part of that is just the quantified self thing. It’s possible to measure fitness and to compare and sync. In some ways, it’s extraordinary you can make a multi-billion dollar business making pedometers, but there you are. It’s not like we didn’t have pedometers in the past. We had them in the 80s and 90s as well. It’s horrible. Now you have them in your app, and it’s a status symbol. It’s kind of like a marker. At the end of the day, it’s like, you did 15,000 steps. I think digital technology makes doing that cheaper and makes it more immediate and more fun to look at.

So the reason people are associating technology with physical fitness as opposed to mental well-being is because the quantified self has reached a point where it can measure physical qualities but not mental qualities?

I think that’s true, yeah. Fitness is also something you can do while doing other things. You can do running and you listen to a podcast, or you walk and – just throughout the day. Fitness is something you can multitask. You can be really good at fitness. In fact, you can beat your friends at fitness whereas mindfulness or meditation, that’s single tasking. You can’t do mindfulness or meditate at the same time as doing other things. I imagine you’re not really – even if you are using an app, you aren’t using two apps at the same time. You shouldn’t really trying to be beat your friends at meditation, get a high score, or whatever. I think they are different things, and that’s that.
Rohan Gunatillake

Director of Mindfulness Everywhere, creators of Kara, Sleepfulness, Cards for Mindfulness and Buddhify. Writer of Modern Mindfulness.

Mindfulness Everywhere: Where did your initial interest start in the overlap between mindfulness and technology?

Rohan: I personally had to reconcile between my practice and my life — either my meditation doesn’t include the parts of my life which are social engaged, digital, relational, urban, or it does. You could stereotype that saying I could have become a monk, ditched meditation entirely, or there’s a third option in including it all together.

Technology is a part of that overall story. I think there is opportunity just because of how many interactions we have with it all the time. I think more and more I think about it, the potential of this area is that there are very few things which a large number of humans have a large number of daily interactions with, and technology is one of those things, particular mobile technology. It opens up a whole new potential for supporting the qualities that us in the mindfulness world care about and know how to develop. In the book, I talk about how we’re quite connected to technology and how we can really turn that relationship around to be supportive. Also if you think of the opportunity — if you’re a meditation super Bond villain, you’re like, how will I get everyone in the world meditating? The obvious thing to use would be phones because everyone has one. That’s where my position is.

There’s a thing about scale in the meditation world — it is very small. It is easy to think it’s bigger just because we talk about the idea and go to conferences about it. The vast number of people even in the UK or the US don’t really practice meditation — there are clearly more
and more people who do it, but there’s still a big opportunity.

Mindfulness Everywhere as a company works on the assumption that current provision – current styles of delivery model don’t serve the larger number of people, so let’s reinvent ways of delivery model. Buddify is the best example of that. Designing Mindfulness accepts that mindfulness products which are explicitly about mindfulness and well-being will only be a minority thing. Recognising that, it asks how might one be able to support the results of mindfulness in people without them actively looking for it. The scalable social impact on meditation in the world isn’t through more meditation apps because that will only ever be a niche, even if it’s a big niche.

**How do you make mindfulness more inclusive? Is this your strategy?**

There’s two ways. I think on the explicit side, you just identify barriers, and design through those barriers. I think that’s the explicit design route. The other route is to get over how you’re approaching mindfulness. Almost break it down. The way I define it is using intentional techniques that result in positive outcomes. That is the sufficiently broad definition that you can play then in different types of contexts. I talk sometimes about how in the mindfulness world, we can fetishise the process. We fetishise mindfulness and meditation in a way where we’re more excited about the process than the outcome.

One of my criticisms of meditation world, conventional meditation world is that the outcome of a lot of modern mindfulness people seems to be to create mediators rather than to solve people’s problems or to make them more calm. If you look at what they do, it’s all about making them formal mediators ‘Do ten minutes a day, that’s what you need to do’ — the process is the thing. We should start looking at what the best ways of helping people develop greater calm, or greater kindness, or greater self-awareness using mindfulness techniques are – and focusing on the outcome rather than the process. It’s a subtle shift, but I think it’s an important one.

**Beyond being stuck in a niche, what are the limitations of explicit mindfulness products?**

People have a lot of baggage around mindfulness meditation. It’s hard to shift the thing around ‘it’s hippie’ and all that sort of stuff. Yeah, so there’s a branding issue.

I think if you think of mindfulness products now as the current generation, the first generation of mindfulness products, I think there a number of key limitations. One is that they are individually focused. Mindfulness is seen as something you do by yourself in isolation from others, and even that’s a limitation. Also, I see it as a danger, that more and more mindfulness is being presented as an experience to be consumed. Plugging in and listening to a British guy tell you what to do is basically how a lot of people understand mindfulness at the moment.

**How would you describe it instead?**

“I see it as a danger, that more and more mindfulness is being seen as an experience to be consumed. We’re giving people mindfulness fish, rather than teaching them how to fish.”
Designing Mindfulness

the scales in a musical instrument. You learn some basic scales, basic techniques, basic ideas, and basic practices. Then once you’ve got a decent handle of those, how they work, why they work, you can then start applying them in different parts of your life. That’s when it becomes truly personalised. I think the consumer approach isn’t really encouraging people to do that. We’re giving people mindfulness fish rather than teaching them to fish. That’s an issue I’d like to iron out in the next generation of products.

What else? Financial exclusion is a big thing for me at the moment. I think it’s a shame that some of the best products are unaffordable. I think that’s a barrier we need to break – the exclusivity of mindfulness, through pricing and language. That’s why we’re working on non-English versions, to bring more people into it. Mindfulness in general suffers from a white, middle-class English-speaking, affluent audience. It’s a shame that products are continuing that trend, so the traditional mindfulness meditation communities suffer from those diverse occlusion issues. They’re free to access but aesthetically, they tend to put people off. If all the teachers are white, middle-aged women, then you get white, middle-aged women coming to classes.

I’m guessing you would agree that although mindfulness is quite niche, it has been growing recently, or at least modern mindfulness has been growing. What do you think are the main drivers of that?

Number one driver is research base — the evidence. I think we’re in a culture where if anything has holy status, it’s a scientific paper said X. It’s what gets stuff into the news. It’s what people write on their websites – even if the majority of that is bad science, being able to say clinically proven, scientific study, especially being Harvard scientific study or whatever is important. That meant it opened up healthcare. It opened up the corporate audience, and those two things of corporate context and healthcare, is where the money is, so that’s what allows the space to grow a lot more. That’s been absolutely key. Then there’s more secondary, general things around smartphone adoption.

Do you think it’s to do with generational values?

Yeah, I think that is there. There’s the story about stresses going down, and broadly mental health, is a more public conversation. I think the way yoga has cemented itself as a pop culture phenomenon is important and opened the door. There’s a big difference between yoga and mindfulness because of the physical aspect. Yoga can be used as a physical beautification practice. Mindfulness is very different in that it doesn’t have that external element, but you can still see elements of it being used as social signaling of how evolved you are — ‘oh, I meditate. Do you meditate?’

Why do you think that the rhetoric seems to be very much about technology and mindfulness or technology and mental well-being being separate? When did that divide emerge and why?

I think there’s a number of things. One is it’s clear. People find technology stressful, so that’s just the direct, experiential response — ‘I can’t deal with my inbox right now.’ That’s one. The second is designers of products actively haven’t really considered mental well-being or in worst cases, have tried to create addictive loops. There’s a design piece to that.
Then the third – if you think of the most senior voices in mindfulness, they’re of a certain generation where they don’t actively have a digital life. So when they’re asked, ‘how should I deal with my phone?’ they’ll laugh. There’s a generational issue from the senior voices in well-being.

There’s actually a fourth one, I think, which I just thought of, which is there’s a very compelling common story, sci-fi story of robots are evil and will take over. Whether it’s SkyNet or whatever. I think there is something that we’re a little bit threatened by technology. I think the idea of – I think this is a little instance of this overall fear that we’re going to get eaten alive by AI or something; I don’t know.

Of those four reasons you gave, the first and second seemed quite linked in a way. The way things are designed influences the way things are experienced. This culture of designing things almost through users’ detriment or without the users’ well-being at the forefront, is that – what is driving that? Is that a systemic issue?

We talk about the bottom line. If users’ attention spans are collateral damage in the race for advertising dollar, ‘so be it’ sort of thing – there’s the whole thing around what you measure, you value. It’s a commercial thing. Companies don’t take the ideas of well-being into account despite them being attention-based companies. That’s definitely a systemic thing, and I think so many companies are based around – let’s just talk about companies who are based around advertising. I think if they were to do measurement, I think they might get a bit terrified. The results could be quite scary, so it’s best to ignore it. The less said about this issue, the better from a corporate perspective.

I think taking into account user well-being could be that next frontier, but we don’t get there unless we have a Greenpeace, or a Friends of the Earth, or a green movement. At the moment, we don’t really have a wellbeing movement. We have bits and pieces, and this is a bit of that. I think – how does that happen in an environment where the effects aren’t as visible like an oil spill or species annihilation. You also have the most powerful companies in the world on the other side.

Also on the user side, there’s no set of clear, universal metrics. It’s a lack of visibility – obesity, you can put a picture on the front page. Conversations happen around the issues of mental health. People don’t see this as an industrial issue. They’re stressed out by their work emails and don’t consider that it is the whole business model. The responsibility is too often placed on the user and the way they’re using it rather than the company making it sure the systems in place. I think that’s a key thing.

“Users’ attention spans are collateral in the race for advertising dollar.”
5 Case Studies

Analysis of mainstream existing digital products through the lens of implicit digital mindfulness.
Medium
Social Publishing Platform
medium.com

An online publishing platform developed by Twitter co-founder Evan Williams. An example of social journalism, hosting a variety of amateur and professional writers, exclusive blogs, and publishers.

Who uses it?
Wide user group across interest areas, primarily Gen Y and Z.

Where is it used?
On the move, in the workplace, at home.

Why is it used?
Development of interest areas, connection to community, general interest, acquisition of knowledge/

When is it used?
Part of daily routine, work hours, liminal spaces

Time Transparency
Kindness to Self, Self-Awareness, Non-Distraction
Unlike many other digital platforms, Medium do not attempt to trap you within their platform — they clearly
Mindfulness Everywhere

notify you of how much of your time and attention they intend to take up. They actively value your time, and do not attempt to trick you onto, and trap your attention within their network using seductive nuggets of information.

No FOMO
Non Distraction, Kindness to Self, Balance
Although, this is in part due to the non-ephemeral nature of the content, Medium does well to assuage the ‘Fear of Missing out’. It doesn’t have a rolling ‘feed’ as such, there is no ‘variable reward’ (Eyal 2014), or slot machine effect (Harris, 2016) and after reading an article, instead of bombarding you with other articles to read, it has a few brief suggestions, but visually prioritises comments and discussion.

Good Design
Balance, Kindness to Self, Non-Distraction,
While it may seem like a cop-out, Medium’s dedication to good design is extremely important. The dedication to readable content, which is well formatted, visually pleasing, and intuitively laid out, exemplifies Medium’s attitude towards valuing their users’ attention and mental wellbeing. A comparable platform which is poorly designed would increase the friction of the reading experience, reducing focus and contributing to distraction.

Quality first
Connection to Others, Non Distraction, Kindness to Self,
Medium do not promote content based on date or based on a writer’s number of followers, but instead based on quality. Prioritising quality, reduces pressure on the part of a blogger to keep updating, and discourages churning out a high quantity of poor quality posts, thus slowing down the overall pace of the platform and experience.

No Celebrities
Connection to Others, Kindness to Self, Non-Distraction
The platform does not prioritise content based on number of followers, but instead on quality. It avoids creating celebrities on it’s platform, diminishing the prominence of the creator’s identity (Dash, 2013), stripping back social ephemera and hierarchy, and placing content at the centre of it’s experience.

Endpoint
Kindness to Self, Non-Distraction, Self Awareness, Balance
With each article or post, the reading experience has a clear endpoint. There is little attempt to queue up new content, or hijack your attention. On finishing an article is a sense of completion, leaving a reader with the freedom to disengage.
Pokemon GO
Augmented Reality Game
pokemongo.com

An augmented reality mobile game, part of the Pokemon game series, which overlays the real world with virtual locations, and virtual creatures (Pokemon) in which a player collects, evolves and battles Pokemon. The in game avatar is controlled by the player’s location, thus moving around is central to the gameplay.

Who uses it?
63% of players are female, with a large age and income diversity across all players. (Forbes, 2016)

Where is it used?
Mainly played on the move, although also can be played when stationary.

Why is it used?
Entertainment, Nostalgia

When is it used?
Part of daily routine, liminal spaces, dedicated time.

positive

Encourages Movement
Kindness to Self, Embodiment
To play the game to its intended extent movement and exploration is required, encouraging a player to go...
outside and walk around, something they may not normally do as part of a daily routine.

**Breaking Habits**  
*Self Awareness, Embodiment*  
Implicitly, the game encourages players to break habits — taking a different route to work, walking instead of getting a bus, going exploring at lunchtime, wandering round the block every hour.

**Engenders Social Interaction**  
*Connection to Others*  
Players are physically brought together as specific pokemon spawn, lures are placed, or at gym locations. Social interaction can be engendered in such moments, which is not available in comparable games.

**Slot Machine**  
*Balance, Kindness to Self, Non-Distraction,*  
The variable reward (Eyal, 2014) of constantly changing Pokemon which may be around you, and a lack of notifying you outside the app which Pokemon have spawned, encourages you to constantly check the app as you would with a slot machine (Harris, 2016).

**Disconnect from Physical Self**  
*Embodiment, Self Awareness, Balance*  
While the game encourages physical movement, the in-game avatar is very much disconnected from your physical self. The players’ attention is with the avatar’s location, in reference to in game locations, as opposed to their physical location in the real world.

**Constant Attention**  
*Kindness to Self, Non-Distraction, Balance*  
When moving in the real world, Pokemon Go requires your constant attention. Even though a Pokemon sighting will trigger a small vibration, you must check into the game every 30 seconds or so to restock Pokeballs from the Pokestops you are passing. A player can never be fully present in a moment, and instead is in a state of constant half-presence.

**Not Peripheral**  
*Non-Distraction*  
Pokemon GO does not make use of the peripherals of our attention. Instead of giving us a sense of calm by delivering any important information to our peripherals, it requires our main focus instead -- we cannot feel calm if we divert our main focus elsewhere (Case, 2016).
Monument Valley
mobile game
monumentvalleygame.com

A mobile game developed by Ustwo, a design company that primarily focuses on UX and UI. The project was initiated as an open project, with no pressure for the game to be financially successful, allowing the team to break many rules of conventional game making, instead approaching the project through the lens of experience design.

Who uses it?
Due to Monument Valley’s non-traditional format, the game has had large successes outside traditional gamer demographics.

Where is it used?
Like many other mobile games, played on the move or in transitional spaces.

Why is it used?
Entertainment.

positive

Understanding the Environment
Non-Distraction, Balance
The game is designed with a good and strong understanding of where it is going to be used, and the
experience has been adapted to fit in to such a context with the least friction possible. Ustwo are aware that the game may be played on the move, in a busy train carriage or in a transitional space, and have thus made levels short enough to complete on a train journey, and have made sure sound is not central to the experience.

**Endpoint**

*Kindness to Self, Balance*

Monument Valley crucially has an endpoint, as Ustwo have made key decisions regarding the game's length and quantity of content. Going against the prevalent ‘more is better’ mindset, the designers chose to focus on quality making each level unique, rather than adding content. The full game takes around 2 hours to complete - the length of a film, and there is some calm achieved in actually completing the game or experience.

**Non-Prescriptive**

*Embodiment, Self Awareness*

Music in the game is particularly ambient, avoiding signaling to the player when there is a climax or a lull in the game. Similarly there is no text, and the main character has no facial expressions. Instead of telling the player how they should feel, or colouring in the main character, they leave it up to the individual to assign their own personality, or emotion to the various moments or touchpoints in the game.

**Self**

Monument Valley is stripped back of much of the (often unhealthy) ephemera you might expect from a comparable game, there are no coins or gems, no level ups and no leaderboards. The experience is encompassing and central, and unnecessary features are left out.

**Framing**

*Non-Distraction, Kindness to Self, Balance*

A note on the design, at many points in the game, the whole level or puzzle is framed by the screen. As Monument Valley’s lead designer mentions, “There's something about having everything you need to solve the puzzle right in front of you.”

**No Ephemera**

*Non-Distraction, Balance, Kindness to*
Quartz App
iOS mobile news app

A app produced by the news company Quartz, intended to complement their other news streams. The app delivers you the news in a conversational format, borrowing from a Messenger-style UI, sending snippets of information in text and gif formats.

Who uses it?
Quartz’ readers - mainly US based, with an interest in the financial industries.

Where is it used?
To keep updated on the news.

When is it used?
At intervals throughout the day.

positive

Sanders attacked Clinton over her foreign-policy platform and ties to Wall Street. He also wagged his finger a lot.

Personality
Connection to Others, Kindness to Self
Quartz app has something often
Mindfulness Everywhere

undervalued — personality. The news is delivered often in a humorous tone, with witty comments, sarcasm, and a healthy mixture of gifs and emojis. This colours the experience with a certain lightness, while also reminding the reader that there is a human on the other end.

Native
Kindness to Self, Balance, Non-Distraction
The app is not ostentatious, and has aligned with a format which the user recognises. The recognisable messenger-like interface does not ask the user to adjust their mindset to a new layout, thus demanding very little work on their part.

Stripped Back
Non-Distraction, Kindness to Self, Balance
The interface is stripped back and minimal, discarding much of the ephemera, and allowing the user to concentrate on the content, which in turn is also concise and well written. All round the app is an welcome exercise in brevity.

Layers
Non-Distraction, Kindness to Self, Self Awareness
Quartz App delivers information in layers, giving the user the choice to engage with each story as much as they choose. Initial information comes as a notification, at which point you can choose to ignore or engage. The next stage takes you into the app, and gives you a summary sentence on the issue, at which point you can click ‘next’ or some variant of ‘tell me more’. Once the app has revealed the full story, you then are presented with a link to a source article, with which you can engage if you are really committed.

Endpoint
Kindness to Self, Balance
There is a curated and finite amount of content which you can access at one time - usually amounting to about 5 minutes of reading. Once all the stories have been relayed to you, there is an endpoint - a ‘come back later’ message, which packages up the experience well, and allows the user to calmly return to their activity without FOMO.

Pacing
Balance
The speed at which the messages pop up is set, and thus the app takes the pressure off the user to blast through content quickly, instead prescribing a healthy pace to the experience.

No Backlog
Balance, Kindness to Self
If you miss a few news stories, Quartz App does not try and catch you up on them. Instead it just tells you what is happening in that moment. This encourages a attitude of letting go, and allows the user to spend more time and focus in the present moment.

Zones of Notification
Balance, Kindness to Self
The app gives you different notifications, depending on the significance of the content. If there is really big news your phone will buzz, but otherwise you will receive a silent notification.
Slack
messaging platform
slack.com

A group messaging software, Slack started its life as part of an online game called Glitch. As a result, it has grown up with the attitude that it needs to function in an environment where the user’s focus is elsewhere.

Who uses it?
Slack has a tiered pricing system, and is accessible by all, however its focus towards teams and group communication has made it especially successful in the workplace.

Why is it used?
Team communication and coherence.
Positive

Primary, Secondary and Tertiary Information

Balance, Non-Distraction

Slack is extremely good at placing information in the correct zones. Its goal to function in an environment where your attention is elsewhere, has led to an extremely good use of peripheral information (Case, 2015). Most interactions or notifications in the platform are communicated to you outside of your main area of focus, through small changes — typefaces toggling to bold, coloured dots, yellow text boxes and subtle icons. More primary notifications can be triggered, by example, if someone mentions you by name.

Reduced Quantification

Balance, Non-Distraction, Kindness to Self

The desktop app avoids quantifying the number of notifications or messages you have, by having a simple red dot next to the Slack icon, when you have messages waiting to be read. By not quantifying these messages, the app reduces mental pressure on the user to respond.

Do not disturb

Non-Distraction, Kindness to Self, Balance

Slack recognises that not all messages are urgent, and that a user’s privacy is important. In ‘Do not Disturb’ mode, Slack stops a user from getting messages unless they are marked ‘Urgent’, not only valuing a user’s privacy, but also alleviating FOMO.
One of the better known fitness wearables, the Fitbit Charge HR measures the wearer’s steps, heart rate, calories burnt, and sleep cycle, and communicates with a mobile app which represents this data over time.

Who uses it?
A tech literate and wellbeing conscious demographic.

Where is it used?
It stays with its user at all times, however notifications can be delivered by it at points in the day, e.g. at bedtime, or after the wearer has been sitting for too long.

Why is it used?
Measurement and self improvement.

Peripheral, Haptic Information
Non-Distraction, Balance, Embodiment,
The Fitbit delivers information in a non intrusive manner, using vibrations to deliver most notifications, and demanding little attention from the user.
Long term benefits
Kindness to Self, Balance, Non-Distraction
There is a clear emphasis on the benefits of the wearable in the long term, and constantly checking collected data over short intervals of time provides little value. Instead more sustainable modes of interaction and behaviour change are promoted.

Short Term Goals
Balance, Kindness to Self, Self Awareness
Some short term goals are promoted, such as daily step count, which may encourage some users to obsessively check their step count until they have reached their daily goal.

Action required to engage
Balance, Non-Distraction, Kindness to Self, Self Awareness
The wearable does not thrust notifications and information constantly on the user. Instead action (pressing a button) is required on the users’ behalf to engage with the product, and wake up the display.
6 Conclusion

Some closing thoughts, and supplementary project information
Closing Thoughts

Building technology which takes care of the minds of the people who use it is essential. This is an important conversation that we all need to have because the do-nothing option is not an option.

We are optimists. We know that so many vested interests want to keep the conversation about wellbeing and the attention economy in the dark because it is complex, massive scale and highly political. But we also know that people who make technology want to make the world a better place and part of that is taking wellbeing into account when making products.

Everyone starts a mindfulness practice for relatively self-oriented reasons. To reduce their stress. To help them deal with difficult emotions. To develop their ability to focus and be creative. But what happens over time is that as one’s practice develops, it becomes less about you and more about other people.

That is why we are hopeful. The movement from self to other is the natural gravity of mindfulness. So as more and more people working in technology come across mindfulness through corporate wellbeing programs, there will come a time when they start to ask the difficult questions about what this mindfulness thing, this attention thing, means for their product itself. Because if mindfulness is solely ghetto-ized as an internal wellbeing practice then we as an industry and a culture will have missed a massive opportunity to actually change the world.

This is not a perfect piece of work, but it is a start. While our day job here at Mindfulness Everywhere will still be making the best mindfulness apps we can, we now do so within this bigger frame. We are committed to exploring Designing Mindfulness and developing it in the future.

Help us make this piece of work and this conversation better by getting in touch.

Help us make it better by telling us what you think is right and what you disagree with.

Help us make it better by inviting us to work with you on our own context.

Help us make it better by applying and adapting these principles to your own products and sharing the results, good and bad.

Help us make it better by making your products better.

Because not to do so is at worst ignorant and at best negligent.

Thank you.
Our Services

For people and organisations who want to start Designing Mindfulness and make this stuff real

The team behind Designing Mindfulness offer bespoke services to support companies explore how to improve and evolve existing products as well as startups keen to ensure user wellbeing is included from the start.

Our holistic approach means that we offer services that relate to both your Product itself as well as your Team.

Existing Product Review
Assessing your products against core mindfulness dimensions and outcomes.

Practical Design Concepts
We provide recommendations and practical concept designs for how to improve the wellbeing impact of your product.

Modern Mindfulness Training
An introduction to modern mindfulness practice with an emphasis on the relationship between meditation training and technology.

Custom Workplace practices
Design of a series of custom meditation practices which your team can use individually or together to support team wellbeing & wisdom.

Get in Touch
Find out more about our services by contacting hello@mindfulnesseverywhere.io. Please be aware that we only take on a very limited set of consulting engagements per year.

Evolving Your Product
- Existing Product Review
- Practical Concept Designs

Supporting Your Team
- Modern Mindfulness Training
- Custom Workplace Practices
The Team

**Rohan Gunatillake**
Mindfulness Everywhere founder
Rohan is one of the most creative makers and thinkers in the world of mindfulness. As well as a deep understanding of meditation, he has a background in technology consulting and innovation and was named by Wired Magazine in their Smart List of 50 people who will change the world. His first book Modern Mindfulness is published in the US in January.

**Santini Basra**
A specialist in using design-led practices to explore and unpack social issues, Santini is the founder of futures research studio Andthen, working with clients to inspire change, increase long term planning skills, and guide change management. Previously he worked for The Glasgow School of Art (GSA) on foresight and strategy projects for Hitachi EU, Royal London, and Barclays Bank. He has also held the position of Designer-in-Residence at GSA, and exhibited work internationally.

Designing Mindfulness is a project from **Mindfulness Everywhere**. Based in the UK, we combine expertise in meditation, technology and design to create products which improve the lives of people all around the world. Our products to date include buddhify, the best-selling meditation app for modern life. The project leads are Creative Director Rohan Gunatillake & Design Associate Santini Basra.
Further Reading

The people whose work and ideas we find most inspiring in this context are Alex Soojung-Kim Pang, Anil Dash, Amber Case & Tristan Harris.

If you would like to read their work (we recommend it) and our other amazing references then please consider this a reading-list-in-progress. And if you think there is anything missing then just let us know and we’ll add it when we update this document.


Gunatillake, R. (2017). Modern Mindfulness (Also published as This Is Happening).


Schull, N D (2014) Addiction By Design

Podcasts we have found helpful:

Note To Self (WNYC)
Mindful Cyborgs (Dancy/Watson)
Spark with Nora Young (CBC)