

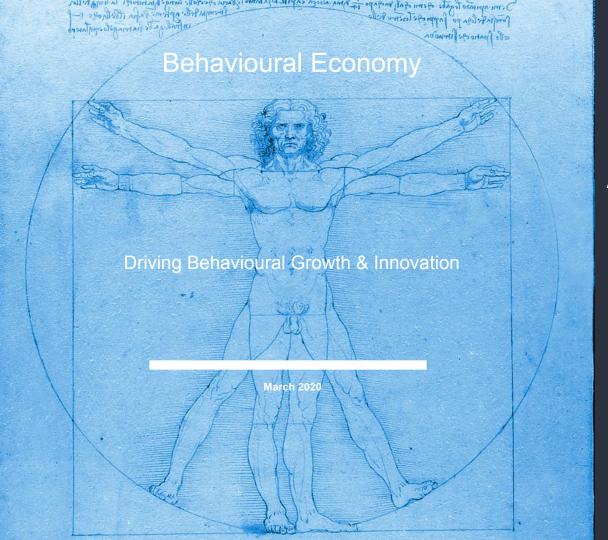


**Behavioural Economy** 

# #COVID19 Behavioural Insights

Behavioural Economy - Science as a Service

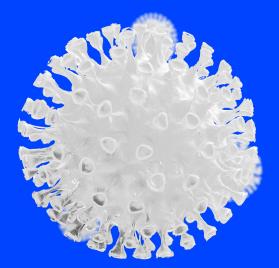
April 2020





# Agenda

- 1. COVID19 Impact
- 2. Continuity Planning
- 3. Continuity Reporting





# 1. #Covid19

**First Behavioural Insights** 







## How does the #CORONACRISIS affect your customers, employees and other relevant business stakeholders?

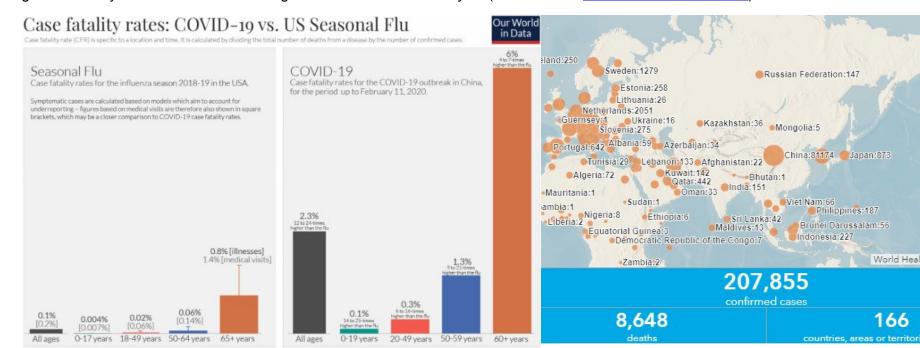
- 1. **Everyone is afraid** how the Corona virus might impact them physically, mentally, socially and economically, but how does that affect you and your business in the mid and long term?
- 2. What are the **direct and indirect consequences** of people self-isolating, staying and working from home?
- 3. How does the current climate of fear and anxiety impact **people's current and future decision making**?
- 4. Why do purely **informational and "rational" approaches** often not help when it comes to fear related behaviour like panic buying or hoarding?
- 5. What is the people's **future outlook and expected timeline** with regard to reaching a state of normality again?
- 6. What can you do as a business to **stay on top and overcome this crisis**?

The answers to these and all other questions you might have about your audience can be found in the behavioural data which is available via social, search, traffic, statistical, and other data sources.



# Volume: COVID19 The Current Context

As of 19th March 2020, COVID19 has become a global pandemic with 207,855 cases registered by the WHO (and counting). The general fatality rate is about 7.5 times higher than that of an ordinary flu (Data Source: <u>Our World in Data / WHO</u>).



# Mention Volume

### Volume: COVID19-Fear **Related Conversations**



















The number of fear related conversations within the COVID-19 topic has been continuously increasing since end of January 2020 and has shown a significant increase in March. Overall, there have been 4,799 conversations clearly stating fear of/about COVID-19 (English language, public social media only, conversations clearly stating fear only)



Key insight: Fear is a typical example of a "hot" state which significantly affects our decision making. In the same way we are generally too optimist with regard to our outlook for the future, we are too pessimistic when we are fearful and hence are more prone to "overreact" in terms of panic-buying, hoarding, delaying all bigger decisions or trying to avoid all risks whatsoever - even if the risk of doing nothing is bigger than the risk of acting!



30 Dec

6 Jan

13 Jan

2 Mar

9 Mar

16 Mar

# Volume: COVID19 Conversations

**Key insight**: The data shows that it is not the absolute number of confirmed Covid-19 cases that is driving fear(ful conversations), but as and how the whole #coronacrisis is being perceived, especially after the WHO have declared it a "pandemic" (11th March 2020).

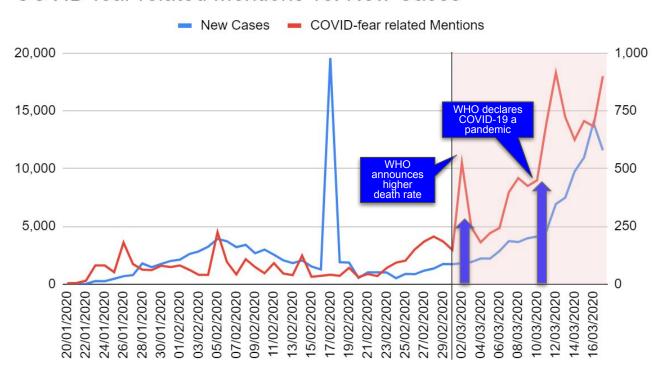


We can see a clear upwards trend in COVID19-fear related mentions, especially since a large spike in new COVID19 cases has been reported on 17th February 2020 (related to large number of cases from several cruise ships).

**Key insight**: Since beginning of March we are in "global panic / global pandemic mode".

Data Source: Brandwatch / WHO

### COVID-fear related Mentions vs. New Cases



# COVID19-Fear & Financial Markets

**Key insight**: Even financial markets are only as rational as the human beings involved in these markets. Since the (official) start of Covid-19 fear, markets are in a clear downward trend. Whilst some of this decline might be rationally explained, at least parts of it might be driven simply by the fear of traders.

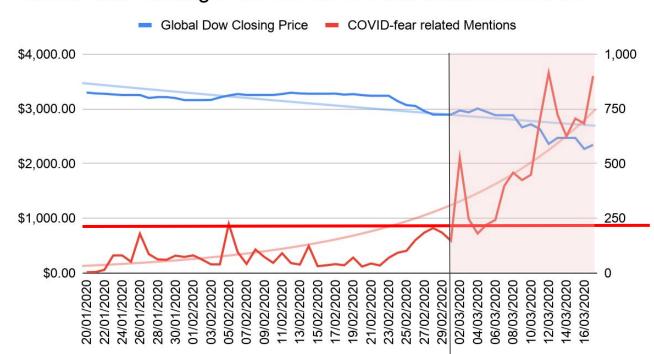


The number of COVID19-fear related conversations coincides inversely with the closing price of the Global Dow (January - March 2020).

We can see a significant drop of the Global Dow Index especially since the number of fear related COVID19 conversations surpassed the level of 250 per day (beginning of March 2020).

Utilising a predictive model will allow resilient investors seize investment opportunities. Data sources: <u>WSJ</u> historical data.

### Global Dow Closing Price vs. COVID-fear related Mentions



# COVID19-Fear & Financial Markets

**Key insight**: Our hypothesis of a fear-induced market plunge manifests in our data which shows a -0.938 correlation between closing price of the Global Dow and the number of Covid-19 fear related mentions. This also fits with Robert Shiller's idea of "narrative economics".



The number of COVID19-fear related conversations clearly correlates negatively with the closing price of the Global Dow (January - March 2020).

### COVID-Fear Related Mentions vs. Closing Price



### Emotions: COVID19 Sentiment via Emojis

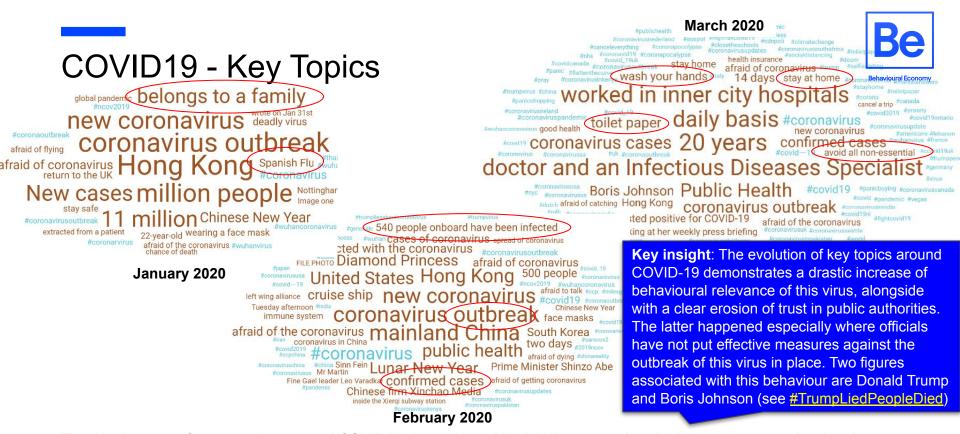
**Key insight**: Emojis have become a key indicator for emotional importance of any given topic in social media conversations. The presence of such a large abundance of emojis in this conversation indicates the emotional and hence behavioural relevance of this crisis.





January 2020 February 2020 March 2020

The development of conversations around COVID19 has become more detailed in terms of emotional depth and variety as can be seen by the number and type of associated emojis over time. Emotional key themes are fear/horror, uncertainty, hope of improvement and irony stemming from absurd situations.



The development of conversations around COVID19 shows that, whilst initial conversations in January were mostly related to understanding WHAT this virus is (see categorisation related conversations, comparisons with the Spanish Flu), conversations in February were revolving more around current updates of confirmed cases and the related fear of infection. As of March, conversations moved on to containment and prevention strategies, including handwashing, self-isolation and provisioning.

### COVID19 - Panic Buying

**Key insight**: Paradoxically, the more authorities and businesses advice NOT to overbuy / panic-buy, the less this strategy becomes effective, especially as our own choice to buy anything at all becomes affected by others who ignore the advice.





queenqueerlord (Iris) @queenqueerlord

am not afraid of getting #COVID-19. I am afraid of having no acess to the things I need to function for a prolonged time period. All because of #panicbuying. I am chronically ill and rely heavily on most of the items being bought out in my area. I am not the only one either.



MushyRedBeans (Irene) @MushyRedBeans

13 Mar @realDonaldTrump I am very concerned about the #panicbuying due to the Corona virus. If this keeps going, I'm afraid everything else will be sold out and that the panic will only make the situation worse. Will the government do something about it? #coronavirus #Covid 19 #coronapocalvpse

13 Mar



chrisdwayer (chrisdwayer) @chrisdwayer

if people would stop #panicbuying this whole coronavirus shit would feel soooo much less intense. but no, i gotta go buy 200 toilet papers 'cause media outlets create panic among uneducated people and i'm afraid i might have to wipe my ass with leaves in 2 weeks.



kmarrs84 (Badgertron 6000) @kmarrs84

16th Mar

don't feel panicked about the virus itself, but I am panicking about how stupid people are being, #COVIDCanada #COVID19 #ToiletPaperPanic #hording #panicbuving

A major fear and concern being raised about COVID19 is less about the direct health impact but about the indirect effects of the social panic emerging around the topic, leading to panic buying, hoarding and other over-reactions in consumer behaviour.

### COVID19 - Self-Isolation

**Key insight**: Already Aristotle knew that humans are "by nature a social animal" - which is why guarantines and social isolation can only go so far as effective containment strategies. Computational epidemiological research has shown that a isolation nudging approach might be more effective than a full quarantine.

17 Mar





aliceunknown - reddit.com

Daily COVID-19 Mega-Thread for Tuesday 3/17

This is my first day working from home too. I'm bored already. Getting in some quality Reddit time. The work programs require a lot of bandwidth and I'm afraid to have Youtube or Netflix up.



17 Mar



My husband's job is not taking this seriously and it scares and enrages me. ...they have to close down for a while. This makes me so upset. It scares me for my husband and myself. I'm working from home but he could pick up the virus and give it to me. It is just evil how some of these companies that will most likely survive this crisis are prioritizing profit over the health and safety of their employees, their families, and

17 Mar



Deb Gascovne - wordpress.com

And change..... | Debs' Journey with Myeloma

...company was being told to work from home where possible and so we talked again and decided that we were going to email the school to tell them we'd be withdrawing them. The kids haven't loved the decision if I'm honest because they can't see their friends but they have understood why we've done it. I'm not sure they particularly love our commitment to

From conversations around self-isolating people who are working from home we can see a clear problem arising around work motivation and potential knock-on effects on productivity. At the same time, people generally approve companies' decisions to send employees home which also gives families more time together. For individuals, companies like #Netflix have identified the COVID19 crisis as an opportunity to launch a new service that allows friends to get together virtually and watch their favorite Netflix titles together.

### COVID19 - Travelling

**Key insight**: Humans have not always been sedentary animals, we have actually lived as free roaming hunters and gatherers most of our time and have only recently started to stay in one place (around 12,000 BC). Key reasons to travel are related to our social nature, so travel bans restrict us in a key feature of our humanity.





#### jackfm.co.uk

17 Mar

### Coronavirus: Britons advised to avoid all non-essential foreign travel for 30 days

...Commons. "The FCO [Foreign and Commonwealth Office] will always consider the safety and the security of British nationals, so with immediate effect I've taken the decision to advise British nationals against non-essential travel globally for an initial period of 30 days and of course subject to ongoing review." Britons who travel abroad should be "fully...



Katherine Tully-Mcmanus - kansascity.com

11

Pandemic ignites interest in remote voting by Congress; McConnell, Pelosi say no ... serious complications from COVID-19, and the CDC has also instructed people older than 60 not to fly, travel or meet in large groups. But senators are doing all of those things, while millions of even young and healthy Americans are being told to stay home. The talk of remote voting is taking place amid negotiations on multiple economic



#### countrystylejim - tumblr.com

7h

...travel restrictions will become so far reaching that weddings will be canceled, graduations missed and family reunions will not materialize. And well, even that big party called the Olympic Games...that could be kyboshed too. Can you even imagine? I'm scared those same epidemic fears will limit trade, harm partnerships in multiple sectors, business and...

Especially for people older than 60 years there have been official guidelines recommending to stop all (non essential) travel to ensure the safety and security of these at risk audiences. As of the effects of travel restrictions in general, conversations are also mentioning a substantial impact on all social life leading to a potentially substantial lack of quality of life.

### COVID19 - Concerns

**Key insight**: Depending on their context, every audience has slightly different concerns about the #coronacrisis. Understanding and resolving these concerns will ensure that your customers, employees and stakeholders will not lose the trust in your business.





#### Christeregis (Chris Ter-Virus) @Christeregis

19th Mar

I am afraid of what happens in a couple weeks, when people start running out of money.

I hope sanity and reason prevails. #coronavirus #CoronaVirusUpdate #COVID—19

#COVID19colorado



#### FM01D (Frank) @FM01D

19th Mar

I'm in the vulnerable category. Leukaemia, asthma, etc... I feel lost. I'm on my own.
Unable to get home deliveries. I'm afraid what tomorrow brings. #coronavirus #covid19



#### y EricG1247 (Eric Garcia) @EricG1247 ♥

19th Mar

From my psych classes it usually isn't death we fear but something else. For me if I die today I'm afraid my family will not have the financial resources to survive because I am the financial provider. Why do you fear death? #WhyFearDeath #COVID19 #StaySafeStayHome



#### ★ DefinitelyNotB3 (Texas\_Batman) @DefinitelyNotB3

19th Mar

Can I just say I'm getting scared. I'm not scared of the #coronavirus. We will overcome this pandemic. My faith in humanity during crisis is strong. I'm terrified of a world economy collapsing. The coming economic downturn could destroy millions of lives. #COVID19

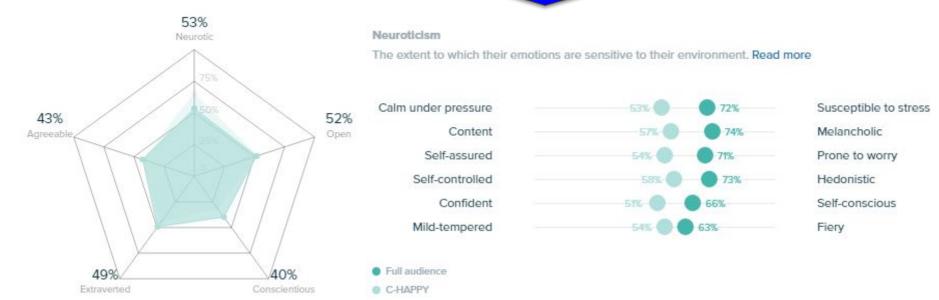
Especially the uncertainty of the duration of the COVID19 crisis concerns people and makes them afraid of the possibility to run out of money. Vulnerable people with illnesses are afraid how COVID will affect their health. Fathers and mothers are concerned about a potential impact on their ability to provide for their families. Overall, apart from direct health concerns, fear of a global economic collapse is the most prevalent concern being raised.

# dudiense:

# Scared vs. Happy People Personality Analysis

**Key insight**: People scared of the Corona virus exhibit significantly higher levels of neuroticism, associated with being more susceptible to stress, more melancholic and more prone to worry. What is interesting is that the same people are also more hedonistic.





Comparing people who self-declare as being afraid/scared/terrified... of the Corona-virus differ from people who keep their calm and happy during these times mainly by their level of neuroticism. This breaks down into key differences on aspects like being able to keep calm under pressure, being content, self-assured and self-controlled.

# **audiense:**Scared vs. Happy People

**Key insight**: Women are more prone to be scared than men and Americans are expressing greater fear than the UK population with Los Angeles leading in scared chatter.





Generally speaking, women are more scared than men about the Corona virus and Americans are more scared than the UK population. Especially the social media population in US metropoles like Los Angeles, Chicago and Atlanta whereas London is over-indexing on people expressing their calm in midst of the Covid crisis.

# **audiense:**Scared vs. Happy People

**Key insight**: It makes sense that women exhibit higher fear of Covid than men despite the fact that men seem to have a higher Covid-related risk of death. Reason could be that women generally show higher <u>anxiety prevalence</u>.



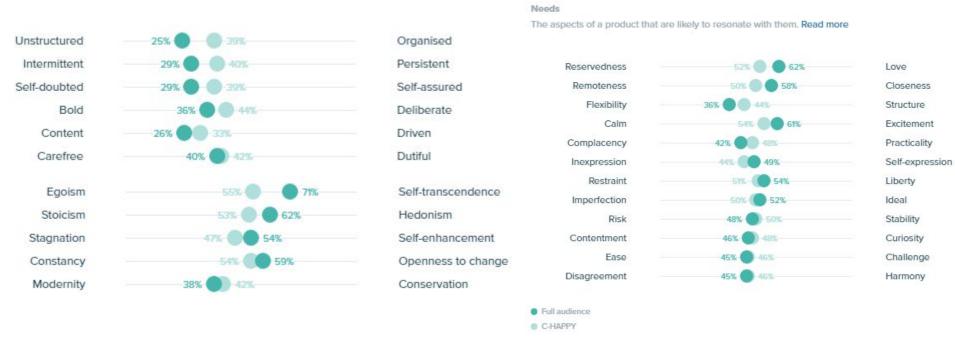


People scared of Covid are more likely to be parents, have a lower level of education and work in lower status jobs such as sales, administrative services, food and restaurants and production.

# **audiense:**Scared vs. Happy People

**Key insight**: Structure, persistence, and stoicism seem to help people weather the current Covid crisis and prevent them from showing high levels of anxiety and fear.





People scared of Covid are generally less structured, less persistent and more self-doubted. They are also less likely to be focused on themself and more hedonistic. They have a greater need for love, closeness, flexibility and excitement.

### Life After Covid

**Key insight**: Especially in the US population, Covid-19 has triggered a massive loss of trust in the current Trump administration and the Republican Party.





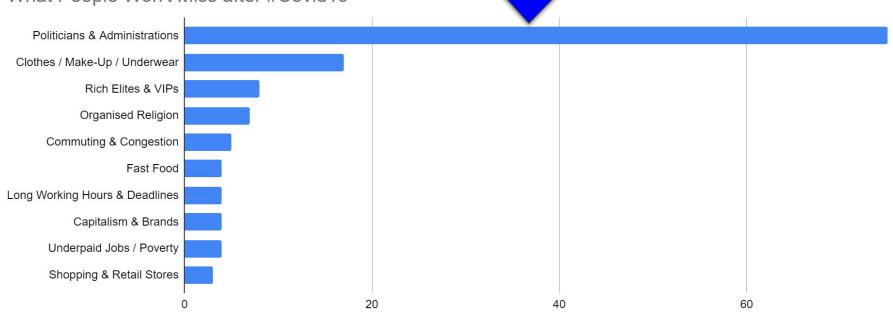
Source: <u>Twitter</u>, N=175. Question: "Thanks to coronavirus, what are some things you've learned we don't need anymore?" Results indicate that the quarantined lifestyle may drive a long-term shift in behaviour that is less consumerist, less focused on rich elites and VIPs and more centered around a fair and sustainable economy.

### Life After Covid

**Key insight**: The top 10 answers reveal that, especially in the US population, Covid-19 has triggered a massive loss of trust in the current Trump administration.







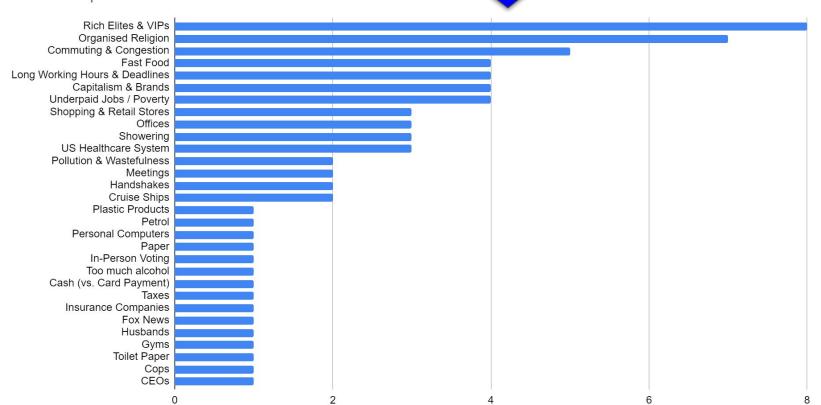
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### Life After Covid

Key insight: People's long list of answers (2-32) indicates the possibility for a paradigm change after Covid-19 towards a more egalitarian, more science-based and more sustainable society!



What People Won't Miss after Covid-19



### COVID19 - Resources















#### Useful links and resources around #COVID19:

- CSSE Johns Hopkins University global COVID19 case overview: LINK
- Our World in Data COVID19 Dossier: https://ourworldindata.org/coronavirus
- Our World in Data COVID Testing Numbers: <a href="https://ourworldindata.org/covid-testing">https://ourworldindata.org/covid-testing</a>
- WEF COVID19 Intelligence Report: LINK
- HU Berlin COVID19 Relative Import Risk Analysis: LINK
- Washington Post COVID19 simulator: LINK
- Singapore COVID19 dashboard: https://co.vid19.sg/
- Euronews how COVID19 changes behaviour: LINK
- WSJ Historical Market Data: LINK
- Business Insider Indices: https://markets.businessinsider.com/indices
- PH News Agency re First Effective Drug Trials: LINK
- McKinsey Report on Covid Implications for Business: LINK
- McKinsey Recommendation for an effective COVID Response Structure: LINK
- COVID19 Open Research Dataset: https://pages.semanticscholar.org/coronavirus-research
- Consequences of Fear: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1299209/
- Randolph Nesse's Fear Evolution Approach using the Smoke Detector Principle: LINK
- Narrative Economics of Robert Shiller: https://www.ft.com/content/5ba0adf6-ec3c-11e9-85f4-d00e5018f061



# 2. What is your Business Continuity Strategy?

How advanced is your continuity plan?

## COVID19 - Business Continuity Planning

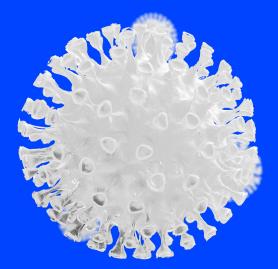




#### Can you answer these questions for your business?

- 1. **What does your business audience think** in the current #coronacrisis what do your customers want, how do your employees feel, what are the expectations of your key shareholders/stakeholders/business partners?
- 2. How do you **ensure that your business does not lose trust** in the current climate of fear and anxiety what will be your short, mid-term, and long-term actions to reassure all of your business stakeholders that you will stand by them during this crisis?
- 3. What are your **current key opportunities**: how can you adapt your products and services so your customers can use them even during these challenging times?
- 4. What is your **crisis communication** strategy? How can you reach out to your customers, employees and other stakeholders to create a strong and trusting community?
- 5. With which **key business partners, public organisations and institutions** can you partner up to form a strong alliance to support you, your business and your audience better?
- 6. How can you **avoid losing and win new customers** when direct / face to face communication is not an option anymore?

→ Our behavioural data driven business continuity reporting will help you find answers to all of these questions!





# 3. BE Continuity Reporting

Who is Behavioural Economy?



# Data + Behaviour + Technology



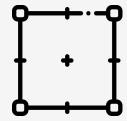
#### **DATA SCIENCE**

We extract knowledge from structured & unstructured data using advanced methodologies



#### **BEHAVIOURAL INSIGHTS**

We use behavioural science to identify unconscious needs and wants to better explain consumer behaviour



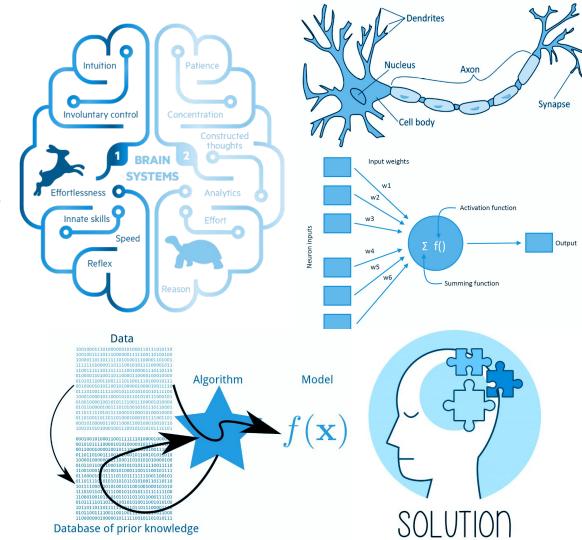
#### **TRANSFORMATION**

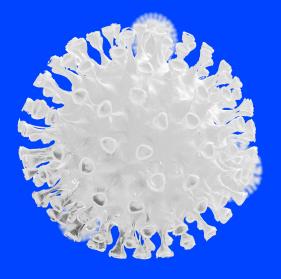
We help organisations evolve and implement new solutions delivering against relevant behavioural trends

# Who Is BE?

Behavioural Economy is an **applied research business** combining solid experience and skills from behavioural science, advanced analytics and digital transformation in an intelligent way.

BE is integrating deep, behavioural insights from consumer psychology and advanced analytics methodologies in order to develop a transformative understanding of consumer behaviour.





Get in touch to get your bespoke business continuity report informing you about key concerns and fears of

- YOUR customers in
- YOUR industry



## hello@behaviouraleconomy.com

Thank you!















### APPENDIX - additional data & resources



#### **Erosion of trust:**



#### siayan @Goussitta · 46m

You could have taken action and saved people, but you lied to the people instead, and people will die because of your lies. You are committing treason. #TrumpPandemic #TrumpLiedPeopleDied #coronavirus

