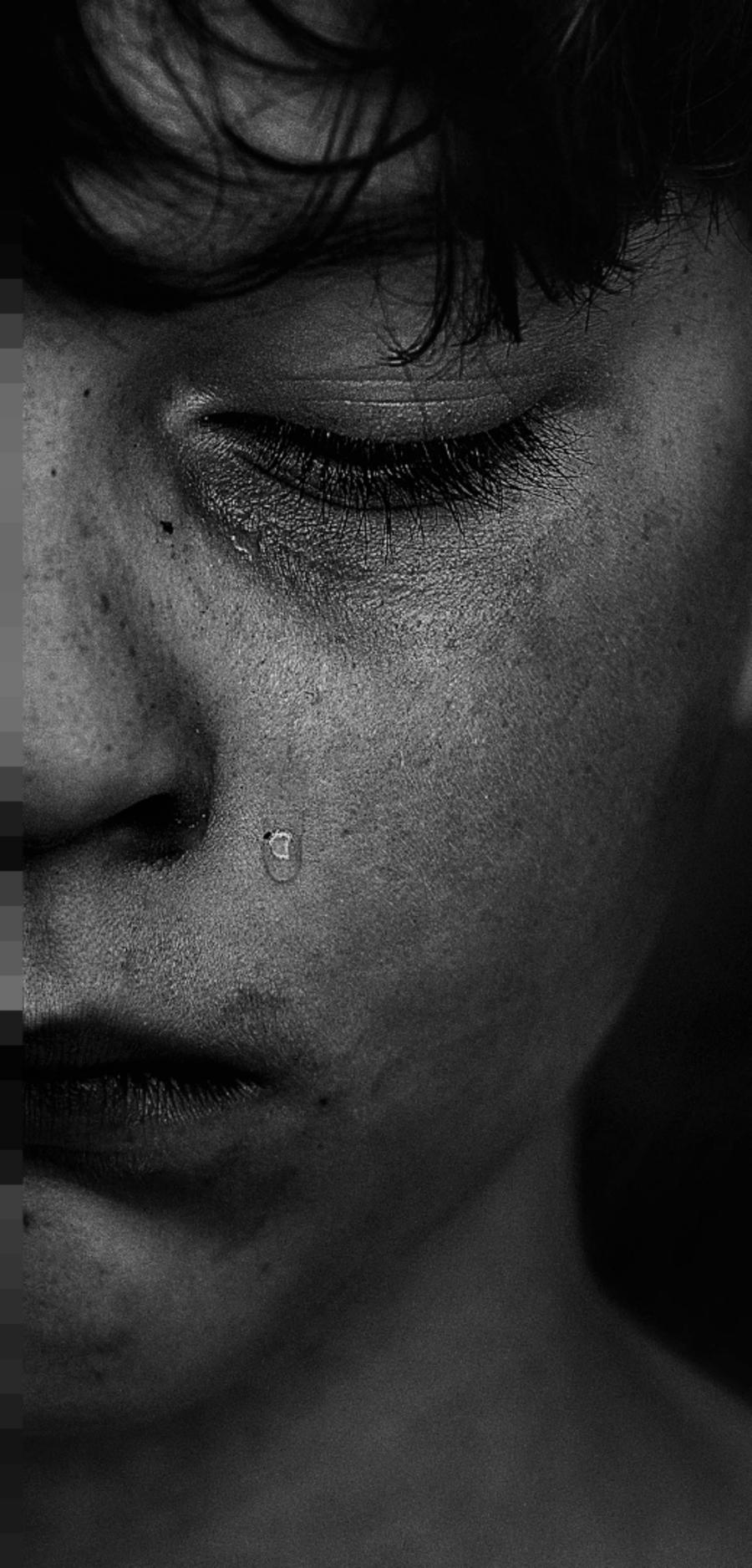


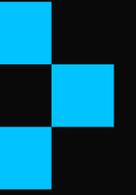
Expert report

Digital interaction and empathy.
The challenges and opportunities of
combining technology with artificial intelligence.

29 April 2019



PREFACE



People are profoundly social creatures. Every day, we wonder what other people think of us. Despite knowing that lying is wrong, we do so to make a better impression on others. Some researchers believe that reason evolved so that we could make arguments for, and justify, solutions that we had already chosen.

The latest technological developments challenge people to consider their own strengths, those abilities which are so unique that a machine cannot be programmed to replicate them. Such strengths involve creative, unpredictable solutions that deviate from previous developments. In addition, machines have been unable to replicate emotional intelligence of a kind that enables cooperation and the achievement of joint goals between large groups of people. Together, we add up to more than a machine.

Our ability to cooperate is therefore highlighted as a skill of the future. Can we bring out the best in each other, understand each other in order to set joint goals, can we

think together? At best, joint thinking can be compared to running a kilometer in just one minute, which sounds impossible. For individuals it is indeed impossible, but joint thinking based on effective interaction makes things possible that seemed impossible at first.

We humans do not always use our opportunities constructively. We intentionally offend one another, build threat scenarios and behave nastily and unpleasantly towards others. Such behavior can have serious consequences. For a child, it can result in life-long trauma. Teenagers and youths are particularly sensitive to criticism from friends and other people. In such cases, bullying and mental violence can prevent healthy personal development.

It has been shown that social and emotional skills are critical to interacting with our fast-changing world. Children begin practicing such skills during play at the daycare stage and continue doing so through various stages of development within the education system. A person's devel-

opment into an effectively interacting individual takes many times as long as for other animals. It has been suggested that this is because there is so much to learn in mutual interaction.

In so far as our capabilities allow, we are all responsible for how we treat each other. Such a responsibility applies even when we are not face-to-face with the other person.

The new social media environments and the Internet in general are touchstones of our humanity. They enable the one-minute kilometer, based on joint thinking, more easily than ever before. But they also make it easier to offend or bully others. As adults, we are responsible for our children's conduct within, as well as outside, this new environment. We should know what our children are doing online. We must also set an example of how to behave during both physical and virtual interaction. The time has come to pull ourselves together.

Olli-Pekka Heinonen, Director General of the Finnish National Agency for Education

SUMMARY



Technological development has created a world characterized by polarized opinions. We encounter each other via digital platforms, but do not converse. Add an empathy gap, and trust is reduced at every level – between individuals and teams, and towards institutions and organizations.

Technology is enabling us to have complex impacts and is changing our everyday lives. **However, digital interaction lacks certain elements;** digital channels reduce human interaction and contact. The digital communication environment provides an easier channel for ‘venting’ and expressing unprocessed emotions. The social media encourages herd behavior, which takes the form of polarized discussions and aggression on the Internet. It is easy to forget that there is a feeling, thinking person on the other end of the line.

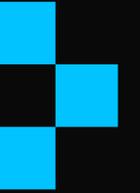
It could be said that lack of physical contact challenges our emotional intelligence, making it easier to engage in bullying. Over the long term, online bullying has a major effect on a person’s self-confidence, self-image and basic self-esteem. Shared feelings and empathy can be a huge resource which generates energy and self-confidence.

We cannot therefore trust in technology alone. So, what can we do? We must make emotional intelligence part of machines. For machines to understand human emotions, they must be able to measure us using machine vision, sensors and text analysis. However, a machine cannot identify individual differences. Although moderation can be used to prevent bullying on chat and comment sites, technology plays a major role in determining what service users see. For example, the expression of empathy should lie at the heart of game design. The work of YouTubers and content creators also has a direct or indirect impact on all of us. Much is expected of us when assessing the trustworthiness of content. People play a unique role as feeling, social and emotionally intelligent beings who need each other. It is high time that we got back in touch with each other and our humanity.

37%

17%

37% of teachers observed online bullying, directed towards students in schools last year, but only 17% of parents are aware of online bullying of their children.¹



EMPATHY + TECHNOLOGY

ERKA KOIVUNEN: Can technology protect us from ourselves?

JUSSI TOLVANEN: Using empathy and technology to put a stop to online bullying

JESSICA HOLLMEIER: Empathy as part of game code

MINNA KRÖGER: Every word matters

EMPATHY + EMOTIONAL INTELLIGENCE

HENRIK DETTMAN: Shared self-esteem

CAMILLA TUOMINEN: Emotions as a competitive factor

VISA HONKANEN: Hate speech spreads through the social media echo chamber

EMPATHY + COMMUNICATIONS

KATRI SAARIKIVI: The human factor in digital communications

SOIKKU: Having a positive impact through the social media

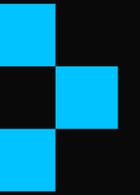
TARJA JUSSILA: Empathy is about civilized communication

KATRI KENNEDY: Artificial and emotional intelligence is a winning combination!



EMPATHY + TECHNOLOGY

EMPATHY + TECHNOLOGY



Empathy refers to stepping into another person's shoes and being able to see things from their perspective.¹ Empathy is rarely externally visible, but others may still sense its presence and importance.² When we can genuinely empathize with another person, we cannot treat them cruelly, and empathy thereby resolves disputes.³ However, the ability to be empathic is not limited to people – it has also enabled many other species to survive, develop and flourish.⁴

Like empathy, technology forms part of our everyday lives. We use technology for work, communication, learning, transportation and many other purposes. Technology makes our lives easier – we can use it to expand our competences, solve problems and create new things.⁵ We can use technology as a substitute for people, as in speech recognition algorithms and data mining enabled by artificial intelligence. Unfortunately, we can also use technology to hurt each other. It could be said that the way in which we use a certain technology in a given context determines whether we view it as good or bad.⁶

Online bullying combines lack of empathy with the harmful use of technology. This phenomenon has emerged on the social and digital media and grown alongside digital media skills and the millennial generation. Online bullying is deliberate and repetitive behavior which causes mental suffering for the victim.⁷ According to the U.S. Department of Health and Human Services, "Cyberbullying can occur through SMS, and apps, or online in social media, forums, or gaming where people can view, participate in, or share content. Cyberbullying includes sending, posting, or sharing negative, harmful, false, or mean content about someone else."⁸ Online bullying can also include sharing personal or private information about someone else, which may cross the line into unlawful or criminal behavior.

Gartner has highlighted virtual healthcare based on artificial intelligence as one of its main predictions for 2019 and thereafter. By 2023, 25% of companies intend to demand that their employees sign written declarations on the prevention of online bullying, but it is believed that 70% of such initiatives will fail because the prevention of online bullying will require changes in the corporate culture.⁹ Should we be worried? Yes. Can we do anything about the issue? Yes!

1 / 5

Every fifth Finnish parent feels that technology companies are primarily responsible for the prevention of online bullying.¹⁰

"Seek first to understand, then to be understood."

– Dale Carnegie

Erka Koivunen:

Can technology protect us from ourselves?

The Internet has made our world smaller in many ways. While we are able to comment freely on statements by, and download images of, complete strangers, we feed each other a continuous flow of instant messages, each more superficial than the last. We interpret messages on the basis of our prejudices and instant assumptions, which spur us to condemn views that differ from our own. The 'tweeting' culture effectively crystallizes the challenge presented by technology; short, provocative comments attract bullies and technology thereby feeds negative communication.

Much is expected of us when assessing the trustworthiness of content. In the cacophony of conflicting agendas, motives and technology platforms, the recipients of communications must assess the reliability of content for themselves. Combined with inconsistent quality of content and hyper-commercial algorithm design, this creates a recipe for chaos. It is difficult to recognize and find neutral information based on accurate data and honest motives that is presented in a pedagogically appropriate manner.

I would therefore say that we cannot trust in technology alone. An excellent example of this was a rating feature offered to online service users, based on the key principle of having experienced experts refer to online transparency when evaluating service quality. Instead of using neutral assessments enabled by the data mass, players quickly learned to use bought-in evaluators and bots that distort evaluations. An example of a positive brainwave would be the Norwegian public radio broadcaster's comment and feedback channel for news, which forced people to answer test questions on news items before commenting. This markedly hampered and reduced serial bullying.

Basic education is more important than ever in the teaching of media literacy. As citizens and consumers, we are all very much in the role of gatekeepers; we are targets of continuous hidden persuasion enabled by technology. This repeatedly challenges our technological awareness and judgement. On the other hand, can we expect technology to restrain our hidden, bad impulses and create a positive connection between us, rather than dividing us?

// *As citizens and consumers, we are all very much in the role of gatekeepers; we are targets of continuous hidden persuasion enabled by technology.*

Erka Koivunen

Chief Information Security Officer,
F-Secure Corporation

Erka Koivunen is Chief Information Security Officer at F-Secure Corporation. His children, who are not yet fully aware of what the Internet is, will not be left to explore its darkest recesses unsupervised for some time to come.

Jussi Tolvanen:

Using empathy and technology to put a stop to online bullying

Our lives are continuously changed by technology. We use new, ever more complex devices and new software and applications through which we view our world in a very different way compared to ten years ago. Artificial intelligence identifies our music and movie preferences and, in the form of 'supportive intelligence', is already helping us to work more efficiently. The physical world is changing: I believe that by 2025, we will no longer be using keyboards and screens, but data will be displayed directly on eyeglasses and we will use voice-controlled computers. Our everyday lives change in step with technology.

It is the unique role of people that will stay the same. We are still socially and emotionally intelligent people with feelings, and we need each other.

However, have our empathic capabilities faded due to technology? This question came to mind when following online discussions featuring words and images designed to hurt and mock the participants. Unfortunately, this worrying and growing phenomenon is affecting adults as well as children.

We need empathy every day and every moment, both in and outside work, particularly now that helpful forms of AI are developing rapidly. In our artificial intelligence survey of 2018, executives listed analytics and data management as their key AI capabilities, but artificial intelligence and emotional intelligence as their weakest management skill areas. This suggests to me that we are too apt to treat technology in isolation and to forget the human element.

It is high time that we got back in touch with each other and our humanity. AI cannot feel empathy like a human, even if it is developing in

huge bounds, now being able to read micro-expressions and identify our feelings from speech and images. We can also take our social skills and learning to a new level by combining the technical features of AI with people's empathic capabilities.

For example, I would like to see AI help us reduce online bullying and increase empathy on the Internet. I challenge all technology companies to develop solutions for bringing an end to online bullying. We need to strengthen our connections with each other and treat others sympathetically online and face to face, constructively challenging each other to develop. In this way, we can make technology help us, since the key issue is still people, not machines.

// We can also take our social skills and learning to a new level, by combining the technical features of AI with people's empathic capabilities.



Jussi Tolvanen
CEO, Microsoft Finland

As a CEO, Jussi focuses on ensuring employee wellbeing and customer satisfaction. He values empathy and the ability to step into another person's shoes, believing that empathy will play a major role in our era of digitalization and technology. In his two years with Microsoft, Jussi has promoted the success and wellbeing of Microsoft's customers, partners and Finnish society; Microsoft has the goal of helping each and every organization and person to achieve greater things through technology. Microsoft is a global technology company that employs 300 people in Finland and over 100,000 across the world.

Jessica Hollmeier:

Empathy as part of game code

Gaming is a passion, and passionate interests evoke powerful feelings. Unfortunately, empathy, which numbers among these emotions, does not always gain the attention it deserves in the gaming environment and game development. When players meet totally unknown figures on game platforms and chat about games, it raises the question of what constitutes responsible communication in such an environment.

Chat messaging is integral to Supercell's game environments. It is a channel for active self-expression and getting in touch with others. I think that all game developers aim to keep chat as clean as possible – in no way is online bullying part of good gaming practices. Of course, there are ways of intervening in the case of negative phenomena. We can close the account of an individual, badly behaving player, or other players can notify us of undesirable behavior. Our chat moderator team goes through tens of thousands of player reports each day. In addition, we continually seek new, technological means of preventing and reducing game-bullying. We are currently engaged in AI-related development projects, teaching machines to recognize and categorize words according to their level of risk, and ultimately to intervene in cases of conduct categorized as abusive. This would enable our moderators to focus on less definitive reports and step up the filtering of messages and quality of supervision.

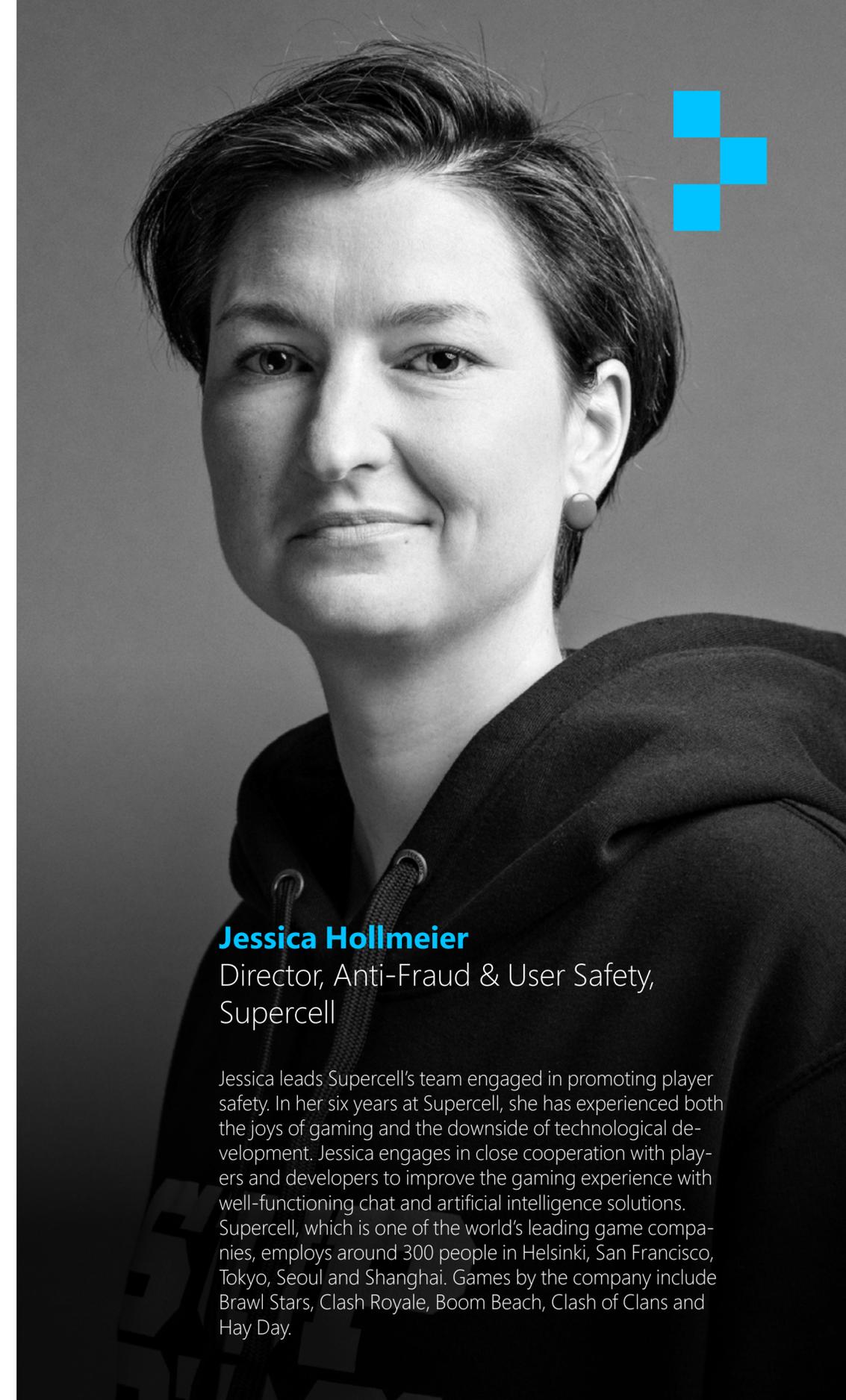
I believe that technology companies play an enormous role in increasing empathy online. At Supercell, we have been collaborating on this issue with companies such as Google, Apple and Fair Play Alliance. I've been wondering whether we could draw up a code for responsible digi-citizens, pointing the way towards good online and gaming conduct.

Empathy is a fundamental aspect of social games, which places the possibility of expressing empathy at the heart of game design. The

choices presented to players and the language used in game tutorials can inspire teamwork and positive social interaction. For example, in Clash Royale we wanted to enrich the game experience through interaction. We created Emotes, small character icons which players can use to communicate with each other during the game. However, we did not foresee how some players would use Emotes to troll players who lose. We decided to return to the drawing board and added the muting feature.

Although empathy in the virtual world is unlikely to rival that of face-to-face meetings, we can improve it markedly if we want to!

// I've been wondering whether we could draw up a code for responsible digi-citizens, pointing the way towards good online and gaming conduct.



Jessica Hollmeier

Director, Anti-Fraud & User Safety,
Supercell

Jessica leads Supercell's team engaged in promoting player safety. In her six years at Supercell, she has experienced both the joys of gaming and the downside of technological development. Jessica engages in close cooperation with players and developers to improve the gaming experience with well-functioning chat and artificial intelligence solutions. Supercell, which is one of the world's leading game companies, employs around 300 people in Helsinki, San Francisco, Tokyo, Seoul and Shanghai. Games by the company include Brawl Stars, Clash Royale, Boom Beach, Clash of Clans and Hay Day.

Minna Kröger: Every word matters

As a technology company, Elisa is part of an ecosystem which enables online interaction. We provide a platform and infrastructure for digital services; unfortunately, a lot of harassment and bullying occurs. That's why we want to move online bullying and digital empathy higher up the agenda of public discussion.

For example, we think it is important to help parents understand what online harassment and bullying can be like. Young people do not always tell their parents or teachers about online harassment. This may lead parents to doubt the existence of the phenomenon. Parents need to discuss these issues with young people.

Last autumn, we completed a survey in which we asked 15-17-year olds about their experiences of online harassment and bullying. It revealed that around 15 percent of young people encounter repeated and continuous online bullying, whereas up to 63 percent reported being occasionally bullied or harassed on the Internet. Significantly, young people say that even individual malicious words or comments lower their quality of life. That is why every word matters.

Online harassment is said to cause anxiety, shame and a sense of exclusion. It is shocking that young victims of harassment feel shame, despite having done nothing wrong themselves. Bullies and harassers are usually known to their young victims, rather than being strangers hiding behind anonymity. It seems that there is a lower threshold for making comments and wisecracks online, and people seldom consider the impact of their words.

Bullying affects the perpetrator and the community witnessing it, as well as the victim. We would be wrong to assume that a group chatting on an open platform will defend a victim of online bullying. We should

all accept that we have a responsibility to intervene. This requires empathy and the ability to place ourselves in someone else's shoes. It is important to consider how we would feel if we were the victims of online bullying. What would we want others to say in such a situation?

Young people also use the social media and platforms to encourage and empower each other. In Elisa's study, up to 63 percent of young people said that they also received encouragement online. How can we support responsible online communication of this kind?

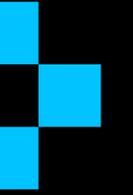
Empathic skills need to be practiced. Harassment is sometimes justified on the basis of freedom of speech, but such a freedom does not entitle people to deny others their human rights. Empathic skills help us identify the line between offending and not offending others. The importance of such skills is emphasized online, where we cannot see other people's faces or hear their tone of voice. I believe that through technology, we can help people to express their feelings better in the digital environment.

In addition, service design should more broadly consider the needs of children and young people. A year ago, we organized a voluntary event with UNICEF, in which we jointly drew up principles on how to take children's needs into account in digital service design. It is important not to exaggerate the perils of the Internet for young people, since digital services and the social media bring many positive things to people's lives. As a technology company, we want to emphasize this in service design while paying due attention to the negative aspects of the Internet. We must provide young people with solutions and explain how they can interact safely within digital environments.



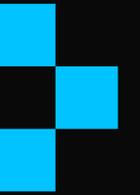
Minna Kröger
Director, Corporate Responsibility

Minna Kröger is Director, Corporate Responsibility at Elisa. In her work, Minna promotes safe, more sustainable and more people-friendly digitalization. She believes that, as digitalization of various kinds advances in the workplace and artificial intelligence solves routine problems, a humane approach, empathy and interactive skills will become precious assets.



EMPATHY + EMOTIONAL INTELLIGENCE

EMPATHY + EMOTIONAL INTELLIGENCE



Since their invention, computers have been used for solving cold, logical problems and have been based on linear mathematics and statistical processes. However, the game has been changed by digitalization and rapidly developing new technologies. In recent years, we have realized that we can raise computers' capabilities to a new level by making empathy, emotions and emotional intelligence integral to IT and technology. We can make computers genuinely understand people and their behavior and feelings.

This new perspective has been emphasized in the development of artificial intelligence in particular, with technology being brought closer to the user in the form of chatbots and service robots, for example. But because artificial intelligence has been unable to fully understand moods and emotions, it has not been easy to make it genuinely intelligent and approachable.

In addition to algorithms and big data, more behavioral data, empathy and emotional intelligence will be needed in the development of artificial intelligence, so that technology can be genuinely integrated with everyday life. When artificial intelligence truly understands emotions, it will revolutionize the way in which people interact with technology.

However, despite its continuous development and clear benefits, digitalization could also build walls between people. Although the Internet and new digital channels have expedited and eased human communications and contacts, they could also limit our natural ways of sharing our feelings with each other. At worst, technology can prevent people from experiencing the empathy that is critical to living alongside others.

How will technology change emotional intelligence and our experience of empathy? How have digital channels changed the way in which we process our emotions? How can technology help us to listen to our feelings? And why are emotional intelligence and empathy so important to us? Where can they lead us and how might they affect group dynamics?

2/5

Only 43% of Finnish parents teach their children, on a regular basis, how to behave on social media and the Internet.²

Henrik Dettman: Shared self-esteem

Emotions always play a role in performance, whether in sports teams or at offices. We can genuinely be ourselves only if we dare to show our feelings.

Emotions and empathy are a huge resource within a group or team. Emotions energize individuals and thereby the groups to which they belong, while empathy is sensitive to even the faintest emotional signals.

Emotional intelligence is about taking an interest in other people and their feelings. It can feel as though emotional intelligence comes naturally to some people. Despite this, it is not an inborn skill: everyone can learn and develop this ability.

Most of us have been brought up to regard displays of emotion as a sign of weakness, which often makes us reluctant to show our feelings. But showing our feelings also shows that we care, whereas fear acts as a kind of brake on moving issues forward.

We can show our feelings in a number of ways, both positively and negatively. After all, this involves a lifelong struggle, so we need to know how it affects our own surroundings. Since the 'end product' of feelings is energy, we must ask what kind of energy is unleashed when we show and use our feelings.

Low points in our own 'game' are precisely the times when we should consider how to help others perform well, rather than focusing on ourselves and our own feelings. When others do the same, a group truly becomes more than the sum of its parts.

For example, in basketball this means resisting the temptation to fret

about a missed shot and thinking about how we can help our teammates in the next play. No one is bigger than the game. A player who understands this thinks first about what they can bring to, rather than get out of, the game.

That is the nature of collective self-confidence. This – rather than individual self-confidence – is what determines the team result. It all starts with the individual, since the group cannot develop unless individuals do.

I think that, in too many cases, social media does more harm than good in human interaction. At worst, it reduces us to emoticons or hashtags visited in the small hours. Too many people are in the habit of sniping in the digital jungle.

Digital channels undermine what is most important to people: human interaction and contact. People communicate physically: when they meet to exchange thoughts, their interaction is not confined to typed words and characters. A physical and visual element is also involved. It is no coincidence that hugs and kisses on the cheek play a key role in many cultures.

Social media also has many positive aspects. All technologies are welcome that increase interaction between people, promote democracy and highlight openness. Social media has made us more equal by providing more and more of us with information that is just one click away and the opportunity to have our say. Ultimately, it is all a question of how we use technology. Hopefully, we will do so in order to help each other and build a better future.



Henrik Dettman
Coach of the Finnish national
basketball team

Henrik Dettmann is the coach of the Finnish national basketball team. He coaches the Finnish national team, known as the 'Wolf Pack', and also coached the German national team to the bronze medal in the Basketball World Cup in 2002. The success of Finland's 2013 squad in the European Championships sparked off a basketball boom in Finland. Dettmann was voted 'Coach of the Year' in the Sports Gala awards of 2014. He is a well-known speaker on the role of emotions and self-esteem in teamwork.

Camilla Tuominen: Emotions as a competitive factor

Emotions are an ancient, smart system that keeps us alive. They are a useful 'partner', even if they are seldom thought of in this way. They tell us whether we should approach or avoid something, 'love it or leave it'. Feelings are a massive resource.

They are also a source of many misunderstandings. In a sense, we tend to regard them as the opposite of reason or logic. For example, we tend to think that they do not belong to the workplace, or can be switched off, as it were. We also tend to think of them as annoying brakes on performance, which 'spring out of nowhere'.

Emotional intelligence also involves understanding and the ability to interpret and process feelings. A person without emotional intelligence would see only facts and linear and logical thoughts.

An emotionally intelligent person can acknowledge and identify feelings instead of being lost in a whirlwind of emotions. People bereft of emotional intelligence can only recognize that, for example, they feel bad, but without knowing why.

Emotional intelligence is a precious skill. Among other findings, it has been shown that emotionally intelligent people perform better at work. Emotionally intelligent people are better at understanding and managing themselves and others. Emotionally intelligent people are able to process their feelings properly, in order to avoid negative outbursts. For example, a manager who is unable to handle disappointment may take feelings of frustration out on subordinates.

Technology and digital channels have posed challenges to the communication of feelings. When encountering another person, we usually see their face and whole body, providing us with a comparatively high amount of information on their feelings. Online, the lack of such information makes it harder to read and take account of emotions.

Anonymity and facelessness are additional problems in online encounters, leading people to say or write things that they would never express face-to-face. Facelessness, which prevents the perception of feelings and empathy, can lead to rudeness, bullying and even hate speech.

On the other hand, anonymity can lower the threshold for asking for help, or seeking answers to questions weighing on our minds, where we would never otherwise ask for help.

Neither the Internet nor technology are direct causes of online bullying or hate speech, they are part of a larger phenomenon. Distress and unprocessed emotions always lie behind unpleasant and unemphatic behavior and bullying. The Internet and the current digital communication environment may provide an easier channel for 'venting' and expressing unprocessed emotions. In many cases, it is easily forgotten that a real person with real feelings is on the other end of the message. Feelings and negative feelings should therefore be processed where they arise, rather than vented online.

Technology can also help us develop more empathy and emotional intelligence, by helping us to acknowledge and process our emotions with an application, for example. Good experiences have been gained from therapy chatbots and virtual-reality trauma therapy solutions, for instance. However, the key issue is to remember that technology can help us, but not actually solve our problems.

As a single issue, online and school bullying is a huge problem. It is the cause of enormous suffering and problems. However, when thinking about online bullying, we should remember that bullies should not be labelled and judged but helped to process their emotions and negative feelings.



Camilla Tuominen
Emotion speaker and author

Camilla Tuominen is an entrepreneur, emotion speaker and author. She is the founder and CEO of Emotion Tracker, a technology company engaged in developing emotional intelligence, and is the author of two books on managing emotions. Tuominen is passionate about teaching people how to understand and manage their own and other people's emotions more effectively and create a new flow of positive energy through their feelings.

Visa Honkanen:

Hate speech spreads through the social media echo chamber

The Internet has generated enormous volumes of data available to everyone and enabled communication with people on the other side of the world. On the other hand, digital interaction is very rudimentary. For example, in conventional meetings people can sense tension as soon as they enter but cannot 'read' the atmosphere in remote meetings. This may lead us to behave inappropriately.

The Internet brings people together, but often at loggerheads. The social media encourages herd behavior, which takes the form of polarized discussions and aggression on the Internet. In herd behavior, the members of one's own herd are tight-knit, while all others are viewed as the enemy. That is why two people with similar opinions find it easy to hold digital dialogue, but two people who disagree find it difficult to engage in a rational online discussion.

In online discussions, we try to attract as much attention as possible. Research shows that this succeeds better through negative rather than positive communications. People are activated by negative or aggressive opinions, and groups 'for and against' are set in motion.

Aggression spreads easily in online discussions. Just five out of a hundred participants behaving aggressively is enough to taint an entire online chat. This is what turns an informal Internet chat into an aggressively polarized argument. In such situations, the herd tends to turn on a scapegoat. The Internet may be a highly developed form of communication, but human beings are not a highly developed species.

Polarization of opinion and online bullying are widespread on Inter-

net chat forums. As a pediatrician, I am particularly concerned about bullying of children and young people, because bullying has a deeper impact on people at a tender age than on adults. For example, because peer acceptance means everything to teenagers, being bullied is a genuinely crushing experience. Due to the importance of group identity, young people cannot simply turn their backs on social media. That is why young people tolerate bullying for so long. Prolonged cyber-bullying has a major impact on a person's self-confidence, self-image and basic self-esteem. The effects may also accumulate, since a typical way of overcoming bullying is to bully others.

When intervening, it should be made clear that bullying is never acceptable and must stop. This perspective is critical when holding discussions with the perpetrator and victim. Most online bullies have no intention of harming anyone, their behavior is simply due to stupidity and the buzz created by the group. That is why it is important to discuss the impacts and consequences of bullying with children and youths.

Bullying should be discussed at schools, but parents are primarily responsible for their children's behavior. A child's behavior towards others later in life is largely determined by behavioral patterns learned from parents and siblings during the first seven years.

We must all realize that inappropriate online behavior has a tenfold impact. Social media always holds the potential for having a good or bad impact. A good principle during communication with others is to treat them as the kind of person they would be at their best. This provides others the chance to be the best version of themselves.



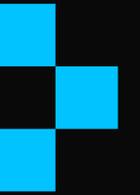
Visa Honkanen

Docent in Medicine, Director of Strategic Development, HUS

Visa Honkanen is Director of Strategic Development at HUS and in charge of developing digital and lean operations. By profession, he is a pediatrician and docent in pediatric rheumatology.

A close-up, high-contrast photograph of a person's eyes, looking directly at the camera. The image is dark, with the eyes and eyelashes being the primary light sources. The text "EMPATHY + COMMUNICATIONS" is overlaid in the center of the image.

EMPATHY + COMMUNICATIONS



Online bullying and hate speech in public discussions have been studied from a variety of perspectives. When do we overstep the boundaries of free speech¹? Why do online discussions so easily polarize²? And what can be done about online bullying³? In 2018, the media abounded with stories about ordinary people subjected to continuous online bullying⁴, celebrities who receive hate messages on a daily basis³, and hate campaigns started by Internet trolls⁵ to silence people who dare to state their opinions on the social media.

A broad consensus has arisen that online communication culture often seems hostile. Despite this, decision-makers and researchers are unable to find easy solutions to online bullying and hate speech. A survey commissioned by Elisa in the autumn of 2018 found that over 60% of Finnish youths have been victims of online bullying and harassment.⁶ Research shows that just one experience of bullying can undermine a young person's wellbeing and lead to feelings of anger, shame and anxiety. A PhD thesis published in the summer of 2018 finds that online bullying has proliferated in recent years and social media is fertile ground for hate material.⁷ The Government of Prime Minister Juha Sipilä tried to tackle the problem with a new bill⁸ seeking to criminalize hate campaigns aimed at journalists and the police.

But what kinds of communication skills should citizens be taught to ensure that online discussions do not descend into verbal abuse or misunderstandings? According to a study⁹ investigating the impacts of social media across all social media channels, Instagram had the most negative effects on the wellbeing of young people, whereas Youtube had the most positive ones. Could we source positive energy from video content on the social media? How might we find solutions that ensure that we treat other people as human beings when online?

24%

Up to 24% of Finnish parents
have done nothing to prevent
online bullying.

Katri Saarikivi:

The human factor in digital communications

Few of us can remain completely detached when we see a good friend laugh or cry. Emotions are contagious, and this helps understand how another person is feeling. Sharing someone else's feelings is a key empathy mechanism. Empathy seems to disappear from time to time on the Internet. One reason for this is the fact that online interaction is often text-based, providing us with little information on the feelings of discussion participants.

Concern is growing about the impact of online bullying on the mental health of young people, because the Internet enables more effective humiliation, exclusion or haranguing of others in front of a large audience. Similarly, concerns have been raised about how well young people's empathy skills will develop if they spend more time online. No evidence has appeared to date to suggest that long-term use of smart devices permanently weakens empathy skills in young people.

How can we become better at communicating our feelings online? We must begin by teaching machines to recognize human emotions, i.e. we must build emotional intelligence into machines. For machines to understand human emotions, they must be able to measure feelings. A range of technological solutions are becoming available for measuring emotions. For example, machine vision algorithms can identify emotions and even micro-expressions from people's faces. Sensor technology can be used to measure physiological reactions, such as pulse rates, the electrical conductivity of the skin or electroencephalography values, or emotional states. Automated text analysis can be used to recognize emotion words in texts.

These technologies can be used to introduce empathy to the Internet. For example, automated moderation of online discussions has already been introduced through text analysis, based on an algorithm that can

identify swear words and heightened emotional states in messages. However, using words and gestures to express feelings is highly individual: ways of expressing emotions such as anger vary, and machines cannot necessarily take account of individual differences. The expression of emotions is also affected by culture and context, factors which algorithms may be unable to address.

Once we know how to measure emotions, we must find out how to convey emotional information online in a way that genuinely improves interaction. Emoticons are one solution for this. However, they involve a similar problem in terms of individuality and interpretation. Emoticons can be interpreted in multiple ways and appear differently in different operating systems. As we gather experience of measuring empathy and emotions, we can look forward to richer and more natural and individual ways of communicating our emotions.

So, what should we do while awaiting the emergence of a more empathic Internet? During online discussions, we should remember that there is a greater risk of misunderstandings than face-to-face. We should therefore be critical of our own assumptions, ensure that we understand others fully and that our own messages are understood.

To protect the wellbeing of children and young people, we must ensure that there is enough of the rich interaction so important to the exercising of empathy skills. Children still need plenty of adult support when using smart devices. Children and young people lack the self-control of adults; after all, even we adults find it difficult to put our phones down. Software developers must take responsibility for the ethical and moral aspects of addictive applications and must ensure that the development of artificial intelligence involves a wide range of perspectives from different sectors and software users.



Katri Saarikivi
Cognitive Neuroscientist

Katri Saarikivi is a cognitive neuroscientist who leads research projects exploring empathy and quality interaction mechanisms at the Cognitive Brain Research Unit of the University of Helsinki. A special area of interest is the way in which such mechanisms function at work and how they can be made more effective during digital interaction.

Soikku:

Having a positive impact on the social media

I made my first videos for YouTube in 2006, when the service was only a year old. Having watched content created by American sketch writers, I was excited by the opportunity to shoot, edit and release my own videos. When I became an active vlogger in 2012, I soon noticed that my channel was picking up followers who were interested in my videos. This also affected the content I was making; I began to wonder what kind of content would interest my followers. The number of YouTube users has grown hugely and a large amount of content is made for other people.

The chat culture on YouTube is rarely very clever or serious, and comments of all kinds, mainly anonymous, tend to be posted about videos. It is much easier to bully people on social media than to say something directly to their face. It is particularly easy to verbally abuse people from a position of anonymity. No matter what video you watch on YouTube, trolls (commentators who deliberately try to provoke others) and disgusting comments are always present. I have been a YouTuber for many years, so I pay little attention to negative comments. Most negative comments are directed at the most popular YouTubers, because they tend to generate a lot of reaction. In addition, videos made by young beginners tend to attract bullies and horrible comments. This is a great pity.

However, bullying on social media has also changed over the years. Bullying is now more widely discussed and other people are more likely to defend the victims. More community spirit has developed within the YouTube culture, and snide comments are no longer considered as acceptable as they once were. More and more people are daring to say that online bullying is no longer okay, even when done anonymously. At the same time, new forms of bullying have emerged, such as sharing videos with friends for their amusement.

The key to preventing online bullying is to spread knowledge of its impacts and understand the ground rules and the fact that bullying is as wrong and illegal online as in real life. Many young people are savvy users of the Internet, having grown up with the online culture. Online bullying can also be prevented by means such as moderation of chats and comments. Technology plays a major role in determining what service users see and what is possible via a service.

I wish that people would realize that, even online, we are all just people. I think that parents and teachers play an important role in teaching the basic principles of how to treat other people online. Another major factor is what popular YouTubers and content creators do and how they behave on the Internet. I would like to set a good example for my young followers.

// *Technology plays a major role in determining what service users see, and what is possible via a service.*

Sonja "Soikku" Hämäläinen
YouTuber

Sonja Hämäläinen, also known as Soikku, is a 27-year-old content creator with over 190,000 subscribers on YouTube. YouTube is a video service established in 2005, with 1.8 billion users in 90 countries around the world. YouTube is primarily a forum for young people and one of the most popular media channels amongst the younger generation. Soikku uses her YouTube vlogs and other social media accounts to discuss topical themes in her life and to share her thoughts with large numbers of Finnish youngsters.

Tarja Jussila:

Empathy is about civilized communication

As the head of a communications consultancy, I look in the mirror when I think about online bullying. Why? I would claim that communication is a problem as well as a solution. With the introduction of technological solutions which expedite everyday communications, we have nourished a snake in our bosoms.

The development of communications technology has undoubtedly turned every one of us into a 'public voice'. Our individualistic era is characterized by polarized opinion. Voices are channeled towards shared platforms, but no longer from one person to another. We cannot learn when we do not converse. Dialogue has turned into tweeting.

Hate communications and trolling involve forgetting the other person and his or her feelings. Empathy is about the ability to live alongside others - why has this ability either weakened or disappeared in so many people?

Social media is a major factor. Celebrities are fair game, as are public officials and anyone who actively 'presents' their lives. Could it be the case that, thanks to our use of the Internet, we have fallen 'below zero' from the lower reaches of the 'empathy gauge'?

The inability to place ourselves in another's shoes, i.e. the empathy gap, is the ugly sister of the Finnish sustainability gap. At a minimum, communication is a bilateral process in which we learn from each other. You can only sympathize with another person's situation if you can feel for them. Empathy and empathicness are forms of communication, and interactive communication is the opposite of bullying.

The ability to empathize is the road to mutual trust: trust between individuals and trust in institutions and organizations. That trust is being

roughly shaken by a phenomenon of our time, lack of empathy.

Communications and we communicators have a major responsibility to reinforce trust. We must build genuine, digital era interaction that helps people understand each other better. We must provide space for diversity and listen to different opinions. Could social media, the related behavioral skills and their development become a repeated element in phenomenon-based learning in schools?

Social media and civilized behavior could be a marriage made in heaven. At the moment, they are like magnetic poles that repel one another, but what if...? Civilized communication, empathy and dignified behavior in all situations and channels form part of civilized conduct. Together we can make life more meaningful for everyone, whether on the Internet, at home, at school or in the workplace. So, we're going to solve this problem, right? With your help!

// *We must build genuine, digital era interaction that helps people understand each other better.*



Tarja Jussila
CEO, Hill+Knowlton Strategies Finland

Tarja Jussila has mainly been engaged in executive communications over the last 25 years. While working for the communications agency Hill+Knowlton Strategies she has personally witnessed the impacts of digitalization on the communications revolution. Another lifelong passion is classical music: Tarja seeks to have an impact through a range of pro bono projects based on classical music themes.

Katri Kennedy:

Artificial and emotional intelligence is a winning combination!

Having an impact is part of key situations in life. Insurance customer service staff often encounter customers who are in a vulnerable state of mind, and this forms the basis of a customer relationship that can last for years. Customer communications and interaction must be as easy and flexible as possible.

Digitalization and the Internet form an excellent basis for easy and customer-based communications. People can gain assistance whenever and wherever - and on whatever device - they prefer. Insurance companies are already using artificial intelligence in the automation of various process phases, such as chatbots for recurring and similar customer service situations. Personal customer service is still required for complex situations that require interpretation and understanding of context.

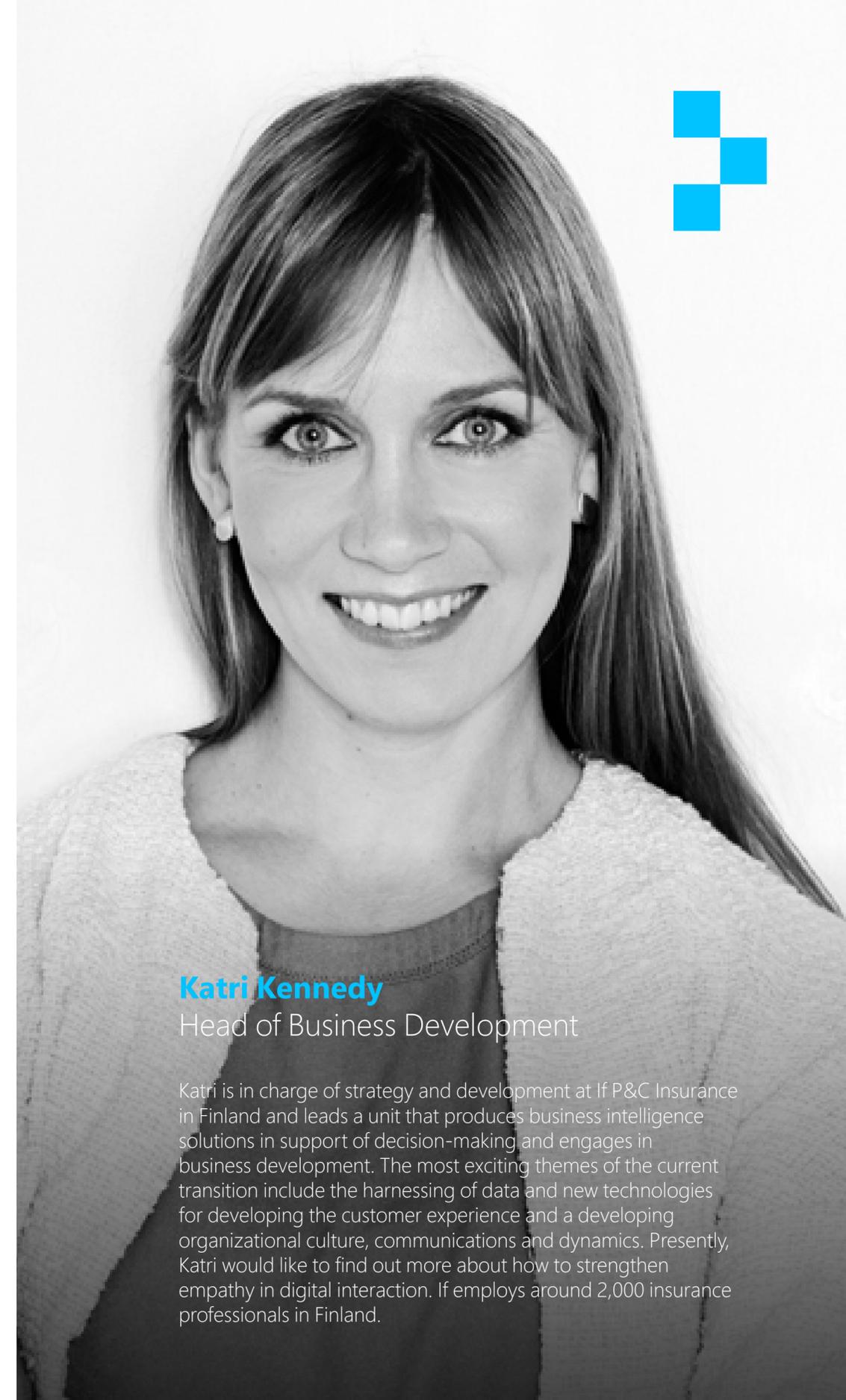
As service models become more complex and requirements grow, it will be important to retain service transparency and clarity for customers, no matter which service channel they select. We have already bedded down a service process based on a customer path of this kind and are now on the threshold of a new transition.

The transition is based on emotional intelligence, i.e. empathy. In terms of customer service, this means more consideration for people's personal situations in every encounter. A seamless combination of digital solutions, artificial intelligence and emotional intelligence will be needed to build trust between insurance companies and customers.

Empathy can be learned and is worth investing in. The HUMEX research project, coordinated by the University of Helsinki, is investigating the

tangible empathic factors involved in interactive skills and problem solving, and how they can be used in customer service activities. Involvement in research is a priority for us when reinforcing empathy in customer service. This raises the question of how we might strengthen emotional skills in parts of our organization beyond customer service – as part of leadership and the practices and culture of the working community.

// A transition based on emotional intelligence, i.e. empathy. In terms of customer service, this means more consideration for people's personal situations in every encounter.



Katri Kennedy
Head of Business Development

Katri is in charge of strategy and development at If P&C Insurance in Finland and leads a unit that produces business intelligence solutions in support of decision-making and engages in business development. The most exciting themes of the current transition include the harnessing of data and new technologies for developing the customer experience and a developing organizational culture, communications and dynamics. Presently, Katri would like to find out more about how to strengthen empathy in digital interaction. If employs around 2,000 insurance professionals in Finland.