

Designing safer digital experiences for young users

Rachel Orr and Maíra Rahme



Rachel is a senior content designer at
Big Motive with a career spanning web and
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played an important role in the development of
the award winning ICO Children's code design
guidance and has since become an advocate
for designing safer online experiences for
children and young people.



Maíra is a service design lead at Big Motive. In the past 15 years, she has been to almost every continent (except Antarctica) working on projects towards ecological sustainability and social goods. Together with Rachel, Maíra led the interviews with experts and helped document the learnings in the Kids First Report.

We would like to thank the entire team at Big Motive for their inspiration, talent and commitment to this work; all of our wonderful contributors for their time, passion and invaluable insight; and Charlotte Cautley and Symon Ross from MCE for editorial support.

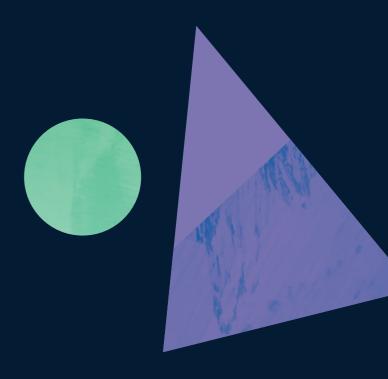
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About Big Motive

Big Motive is an award-winning service design and innovation studio that creates future-ready digital services in the areas of health, government, sustainability and social impact.

Their work spans collaborations with global brands, local governments, tech start-ups and non-profits and ensures that digital ambition and transformation are delivered in step with the needs of people, communities and the planet.

A member of the Global Service Design Network, Big Motive is also a Corporate Partner of the UK Design Council and was notably awarded 'best in show' at the UK Design Week Awards for its work on the COVID Response Service for Northern Ireland's Department of Health.



Background

We are committed to keeping children and young people safe online. We recognise that we have a role to play in the overall picture and want to do all we can to solve the problem. In 2021 we worked with the Information Commissioner's Office (ICO) to create design guidance for a new statutory code of practice called the Children's Code.

After collaborating with designers, data experts and technology advisors, we helped to create a 'design guidance service', which helps teams to empathise with young users and better understand children's rights, particularly around privacy.

Its aim is to make apps and online services safer for children and has already led to changes in how teams are creating digital products and services for children and young people.

Since last year we have already started to see some changes in the industry, such as:

- Google making Safe Search the default browsing mode for all under 18s.
- YouTube turning off auto play for under 18s, and break and bedtime reminders turned on by default.
- TikTok and Instagram disabling direct messages between children and adults they do not follow.
- TikTok do not push notifications after 9pm to children aged 13-15 and after 10pm to 16–17-year-olds.

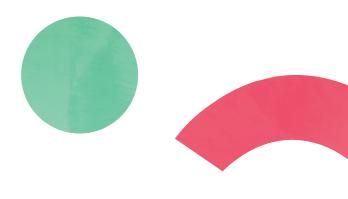
There is progress, but our work with the ICO really opened our eyes to the array of dangers out there in the digital space, especially for children and young people. We realised how much work still has to be done to ensure that children's safety is prioritised when products and services are designed.

Rather than just improving our own practices and mindsets to promote that change, we want to share our key learnings and encourage organisations, product teams and fellow designers to follow in our footsteps and put *kids first.*



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The Why

The children of today are exposed to technology and the internet from a very early age, which means they are growing up as increasingly proficient digital natives. This easy and constant access to the digital space allows children and young people to explore their creative side and enables them to socialise, while providing a sense of independence. However, much like in the real world, digital experiences can also become a doorway to formidable danger and significant health and safety risks.

As creators, writers, designers and innovators, we have the power to make a difference by designing safety into the online services and products we create. We believe that this power means organisations, product teams and designers have an opportunity to make the online world a safer place for children and young people.

We need to create solutions that are not only entertaining for children and young people, but also offer them respect and safeguarding measures that factors in their developmental and data privacy needs as well as their overall safety.

With that in mind, we have framed this report around four principles that inform a framework for designing better safer digital experiences for young users.

These principles are:

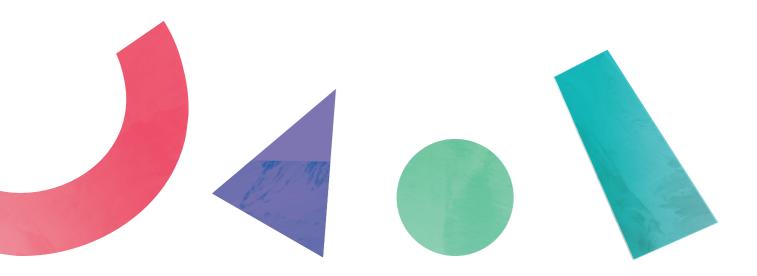
Trust, Fairness, Growth

and Consideration

Our hope is that these principles can become a framework for designing safer apps and digital services and a useful reminder to creative teams everywhere to ensure children's rights are protected online.

What this report is

Big Motive has extensive experience researching with and designing for children and young people. However, to ensure breadth and depth of insight in this report, we reached out to a range of other professionals across different organisations that interface with young users. We sat down with 16 experts to get their views, insights and opinions and created this report based on our findings.



Our aims

To share our knowledge

Sharing our learnings couldn't be more important when it comes to creating digital products or services for children. We all have the same end goal – keeping children safe online and in the digital space. Thinking about children's rights in a digital environment is new for most of us and a lot of people don't have the knowledge or resources to be able to do so effectively.

Whether you are a project manager, service designer, senior stakeholder or

better outcomes

To create a play book that translates

our findings into simple steps towards

developer, we wanted to make sure this knowledge can be accessible to everyone. The report therefore, translates the extensive knowledge of our contributors into a step-by-step guide.

To celebrate those who are doing great work in this space

There are so many wonderful people and organisations who are really going above and beyond to consider children's interests first when creating products and services. Our intention is to celebrate and build on this work.

To inspire people to create safe and fair online experiences for children and young people

We understand that creating digital products and services requires a lot from companies and designers, but our experience has confirmed that it can be done. We hope this report inspires you to find creative ways to design better digital experiences for kids.

Inspiring people we talked to...



Technology Advisor at the ICO

Ahmed is a Principal advisor for the Information Commissioner's Office (ICO). He is an expert in AI, data and design. He has a passion for understanding the impact of technology on society and the ethical questions that emerge. He recently co-led their award winning Children's Code Design Guidance.



Technology Advisor at the ICO

Georgina Bourke is a Principal Technology Adviser at the ICO specialising in UX Design. She works on projects that look at the intersection of emerging technologies, data rights & user experience. She recently co-led their award winning Children's Code Design Guidance.



Creator of 'Play for Health'

While Fabienne worked on KORA, a mobile app designed to train children's walking behaviour, she realised that knowledge about child-centred design is not easily available. Out of this need, 'Play for Health' was born: an accessible and comprehensive guideline on how to design for and with children. She hopes to inspire fellow designers to create child-centric products.



Frances Brown

Co-founder Nightingale Research

Frances studied applied psychology, with a particular focus on developmental psychology. Following her degree, she qualified as a primary teacher and taught children with autism, then carried out academic research, working with children with autism, down syndrome, dyslexia and specific language impairment. She moved into design research in 2013 and founded Nightingale with her husband Michael in 2016. Her experience with children came in useful when she worked on several projects for LEGO, researching new digital platforms and games with children aged 6-11.



Designer & Gerontologist

Dr Patricia Moore is an internationally renowned designer, gerontologist, and leading authority on Inclusive Design. From 1979 to 1982, Moore travelled throughout North America disguised as an older woman — her body altered to simulate the normal sensory changes associated with ageing — to better respond to people, products, and environments.



Policy Officer at 5Rights Foundation

Daral Williams is a Policy Officer at 5Rights Foundation, which works to build the digital world children deserve, crossing three main policy areas:

data privacy, child-centred design and children's rights. 5Rights Foundation works with governments, international institutions, professional associations, academics, businesses, and children.



Kruakae Pothong

Researcher at 5Rights Foundation and Visiting Research Fellow at the London School of Economics and Political Science

Her current research focuses on children's education data and the child-centred design of digital services. Her broader research intersects digital policies with digital design, spanning the areas of human-computer interaction, digital ethics, data protection and internet policies. Dr Pothong specialises in designing user-centric, including child-centric, design research to elicit human principles and expectations of technological advances.



Sonia Livingstone

DPhil (Oxon), OBE, FBA, FBPS, FAcSS, FRSA, Full professor in the Department of Media and Communications, London School of Economics and Political Science

Sonia has published 20 books on media audiences, including 'Parenting for a Digital Future: How hopes and fears about technology shape children's lives.' She has advised the UK government, European Commission, European Parliament, UN Committee on the Rights of the Child, OECD, ITU, UNICEF and others on children's internet safety and rights in the digital environment.

Inspiring people we talked to...



Researcher at Spotify Kids

Carolyn has been conducting user experience research for nearly 15 years. Her work experience has been with companies such as Trip Advisor, BlaBlaCar, Samsung, DPD, Armani, and Spotify, often with a focus on identifying new opportunities for innovation. Most recently, she has led the research at Spotify for the Spotify Kids app - conducting research with families to help build 'a playground of sound" for the next generation of Spotify listeners.



Design Manager at Spotify Kids

Worked on Spotify Kids, a standalone audio experience for Spotify which aims to create the most fun, safe and personalised listening experience ever for kids.



Product Manager at SafeToNet

Jack is the Product Manager of Mobile Solutions at SafeToNet. Jack is part of the team that builds solutions to help safeguard children from online abuse before it happens and before the damage is done. All solutions protect the privacy rights of the child and are designed to be transparent and to create conversation between the parent and the child.



Co-Founder and CMO YEO Messaging

Sarah is an experienced tech marketing leader with 12+ years experience in Marketing and Advertising. Sarah is currently Co-Founder and Chief Marketing Officer of YEO Messaging - a private messaging platform and the only messaging app that delivers messages to a human and not just a device using patented continuous facial recognition. Sarah is passionate about people's privacy. In 2019, she became a mother which fuelled her passion even further, where she is now an advocate for children's rights to privacy.



Sixteen South

Colin Williams is a BAFTA winning children's television creator, showrunner and writer. He founded Belfast based Sixteen South in 2007 to create, produce and distribute quality television to every child in every home in every country and his work can be seen on all major networks across the globe. Colin has gained an international reputation for the highest quality work and has already created and produced 600 episodes of award winning children's television.



Creative Director of User Experience & Design for BBC Children's & Education

With over 20 years' experience designing for children across digital platforms I now lead a talented team of user experience designers, illustrators and design researchers focused on creating amazing and safe experiences for children from preschool to 16 years. Working with globally celebrated and well-loved brands CBeebies, CBBC and Bitesize we help the next generation navigation this exciting a challenging world. We develop digital products to inform, educate, entertain, and inspire them.

The principles

The principles in this report have been inspired by The United Nations Convention on the Rights of the Child (UNCRC). The UNCRC is an international human rights treaty that grants all children and young people (aged 17 and under) a comprehensive set of rights.

There are four central principles that underpin the implementation of all the rights in the UNCRC:

The best interests of the child:

whenever decisions or actions are taken that affect children, the best interests of the child must be a primary consideration

Non-discrimination:

the rights of all children should be ensured without discrimination of any kind

Right to life and development of the child:

all children should be enabled to develop in an optimal way – physically, mentally, spiritually, morally, and socially

Right to be heard:

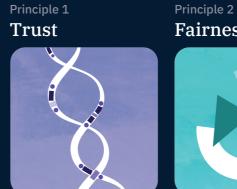
children should be able to express their views feely in all matters affecting them, to participate in all decision-making processes related to their lives, and to exert influence over such decisions in accordance with their age and maturity.

Taking inspiration from these central principles, as well as looking at the common threads throughout our research and conversations with experts, we devised four distinct principles: *Trust, Fairness, Growth and Consideration*.

The principles in practice

In order to create a positive change in the digital world and make products and services as safe as possible for children and young people, we need to rethink the way we currently do things. The principles of Trust, Fairness, Growth and Consideration, can help us on the journey of creating safer experiences for children and young people. We need to follow these principles in every step of the process if we want to make a difference.

So how might we apply the Kids First principles to the process of designing...







Principle 3



Principle 4



Principle 1

Trust

Digital experiences designed for children and young people should prioritise and reflect what is best for them.

Trust

The same wavelength

"Inviting children in to talk to the team builds a bit of an ethos for the company that you're doing this for them"

Jack Pursey, Co-founder SafeToNet

Trust begins within. Designing safer services for children should be aligned with an organisation's ethos and purpose, with all stakeholders committing to honouring the trust and faith that parents and kids have invested in your product.

Before even touching prototyping tools, planning projects or thinking about your research strategy, think about ways to get your team aligned with this overarching goal. An organisation-wide, or at least a team-wide approach is advantageous if a company is serious about designing safer services for children.

If your organisation and team are attuned to creating what is best for the child or young person, the ethos that has been created will influence the decisions that are made, This in turn will inform the product or service design, and finally you will notice the ripple effect in the experiences of children and young people.

Knowing or sensing that a company cares about children's needs will help build trust with parents and kids.

To help get the entire team on the same page, SafeToNet had children come in and speak about their experiences with their safeguarding app. By inviting all levels of the company to hear about the child's experiences, their team made sure young people were at the forefront of their minds when designing the service. Introducing the team to their users also helped them put a face to the word 'child', leading to them feeling more responsibility to keep children safe.

Trust

The right expertise

"Just because you are used to researching and designing with adults, doesn't mean you are equipped to do so with children. Reach out to people whose livelihood it is to know and study children."

Fabienne Erben, creator of Playful by Design

It's important to have some expertise within your team to design for children and young people. Not everyone in the team has to be an expert, but they should have a basic understanding of what is right for the child or young person when creating digital products and services.

You may find when faced with creating products or services for children and young people that there is a gap in expertise in your team. There are a few ways to go about gaining expertise. For example, implementing child-centred design training is a great way to ensure that your team has the building blocks in place, or you could rely on expert advice to know what you have created is right for the child.

There are many professionals out there who are experts when it comes to working with children, from developmental psychologists to teachers, social workers or youth leaders, these are the people who know the kids world inside out and can provide valuable advice to your team if you lack the expertise.

As pointed out by Fabienne Erben, creator of 'Playful by Design':

"Just because you are used to researching and designing with adults, doesn't mean you are equipped to do so with children. Reach out to people whose livelihood it is to know and study children."

Even large and well-staffed organisations can benefit from hiring an expert or subcontracting an expert team. To make sure they followed best practice methods when researching with children, Spotify Kids hired a consultant who helped them to learn strategies for setting up sessions for success and tips for moderating with children. Carolyn Chmielewski, Senior User Researcher at Spotify, said her experience was "invaluable".

Trust

Get input early and often

"You need to involve children throughout.

We say that you have to test your designs with children, but a lot of organisations don't have good user research practices anyway, so this is actually quite a big challenge for them, but still really important."

.....

Georgina Bourke, Technology adviser at the ICO

To get the most out of researching with children, we recommend getting their input as early as possible and frequently throughout the project. This means giving them a voice from the very start of the process, rather than waiting until you have the finished product and merely asking if they like it.

Involving your participants from the very start of the process and asking them for feedback at every stage ensures you can make changes as you go and puts their feedback at the forefront of the creative process.

Doing frequent check-ins can help you to spot anything you may have missed and gives you time to make appropriate adjustments before moving onto the next stage. Although it requires a bit more time and effort, early research will be worth it in the long run.

If you wait until the end and the research participants don't like the results, you may have to go back and change everything.

Children are such a rich source of inspiration and insight, so allow yourself to be surprised by what they have to teach and let them be the co-creator of your solution.

Trust

Safety first

"We have a duty of care. We regularly re-do the background checks and update the training. Safety and comfort comes first for children."

Robert Hamilton - BBC

When conducting research sessions with children and young people, you want them to feel comfortable, and most importantly, you want them to be safe.

Research sessions can often be quite intimidating for children and young people, especially if it is their first time taking part in one. It is important to consider how to create a comfortable and safe environment, with special attention required when engaging with organised groups or with children in care. We recommend consulting with the staff member involved to understand if there are any activities or discussion topics that should be avoided. This ensures that no boundaries are crossed and the children can feel as safe as possible.

The other way to ensure safety is to make sure that your organisation regularly completes the right safeguarding measures, such as background checks or training. This shows that you have truly considered what is best for the children and young people you are researching with. When discussing this with Robert Hamilton from BBC, he told us that their team conduct DBS (Disclosure and Barring

Service Checks) every three years, as well as in-house training that covers all aspects of research sessions to chaperoning on a BBC programme.

Background checks come under different names and forms depending on where you are from. Some UK examples include, AccessNI checks in Northern Ireland, a basic disclosure in Scotland, or a Disclosure and Barring Service (DBS) check in England and Wales. Having the right safeguarding measures can help to create a sense of trust and safety.

We would also recommend performing research activities with children and young people in the presence of a parent, guardian or relevant professional to add an extra layer of safety to the session. If you decide to conduct your research with a school, the teacher will already have the necessary requirements to take care of children, meaning they can help to safeguard the session.

Trust

Risk awareness

"Understand the risk of your product, really understand the risks. Work with your legal team, your Data Protection Officer, go through your product, understand the risky points and create appropriate interventions."

Ahmed Razek, Technology adviser at the ICO

The earlier you start to consider risks in your service, the better. To ask questions about safety is one of the greatest superpowers we can have when creating better, safer and more trustworthy experiences for kids.

"We need to really think in advance before building something; what are the safety precautions that need to be built into the system, what are the privacy requirements that need to be embedded before we even open it up?"

- Sonia Livingstone

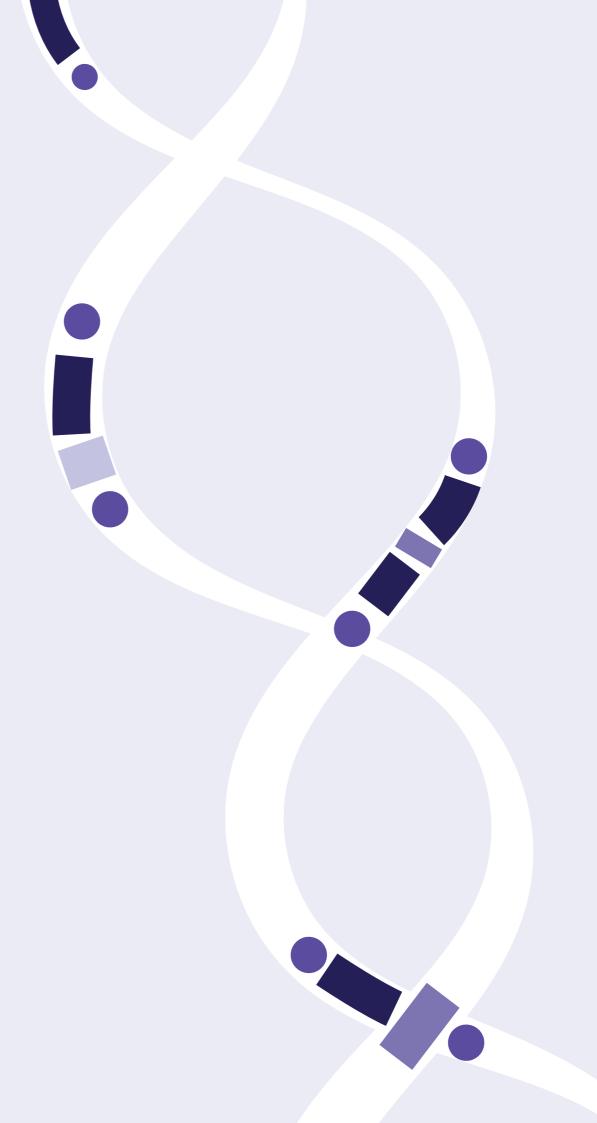
Since the birth of the internet, enough time has passed to have an understanding of how children and young people used the internet, say, ten years ago – and how that relationship has changed, and keeps changing over time. While taking risks is an important part of a child's development, we should ensure their digital environment is a safe space for

them to do so.

The CO:RE 4Cs classification recognises that online risks arise when a child:

- Engages with or is exposed to potentially harmful CONTENT;
- Experiences or is targeted by potentially harmful CONTACT;
- Witnesses, participates in or is a victim of potentially harmful CONDUCT;
- Is party to or exploited by a potentially harmful CONTRACT.

The more you learn about safety, the better the questions you will be able to ask about the safety of the experience you are providing.



Principle 2

Fairness

Great digital experiences for kids give equal consideration to developmental needs, age, ethnicity and religion



Not all children and Teenagers are the same

"An age-appropriate level of knowledge is good."

Frances Brown, Nightingale Design Research

When creating digital products for young people, be aware of the age group of the users: there is no one-size-fits-all approach to design for all ages. Even children who are the same age have different levels of understanding. No matter what role you play in the project, it is really important to understand these needs in order to create the right experience.

If you are unsure of the user's age, you need to design with the youngest possible user in mind and then provide opportunities to further the explanation for older children and teenagers.

From 1-17 there are 5 different user groups to consider. As a guide, the ICO's 'Children's Code' breaks up children's age into five age-ranges:

- 1-5: Pre-literate and early literacy
- 6-9: Core primary school years
- 10-12: Transition years
- 13-15: Early teens
- 16-17: Approaching adulthood

In addition to different age groups, there are different developmental needs in those ages that you must cater for, and if you need help, there are specialists who can help you navigate those needs.

Accessibility is something that every everyone should think of, but we reiterate this when designing for children. Make sure that your designs cater for children, teenagers and parents who have disabilities or learning difficulties so they can fairly experience the digital world.

Fairness

Picking your participants

"Have a diverse group of children take part in your research study. You'll have some young people who are extroverted and some who are shy. Have more than one session too so that the kids who don't come to the floor have time to warm up."

Daral Williams, 5Rights Foundation

When engaging with your users, aim for fairness and diversity in participant recruitment, ensuring that a range of backgrounds, experiences, attitudes, views and abilities are represented in the feedback.

It is important to gather as many opinions as possible when conducting research to ensure you have captured a variety of perspectives. By screening your research participants you can ensure that the voices in the room represent a broad range of children from different backgrounds, who may have completely different experiences in life and different personalities. This is crucial as their experience of the world informs the way they perceive your product and/or engage with your research.

For some participants, your session may be their first experience participating in user research, which can be quite daunting. These situations can make children quite nervous, affecting their ability to participate in the study.

In the pre-testing session, try to get to know the child or young person.

Sometimes even the shyest of kids will open up the more that they know you.

Why not try a few icebreakers or fun games to ease them into the session?

Ideally you want to avoid formalities and create an environment which is friendly and welcoming. The more a child feels comfortable in the session, the more they will open up to you and the better the results.



Fairness

Building relationships

"I would go to the children in school, and I would do the research with them there. Their teacher's assistant would often be with them too."

Frances Brown, Nightingale Design Research

Engaging with schools or youth organisations is a great way to get a wide range of children and teenagers from different backgrounds to interact with your product and give valuable feedback, while in a safe environment.

We recommend reaching out to teachers or headteachers and explaining what your service is about, which activities the children would be asked to perform and place an emphasis on the skills the children could gain by participating.

In the UK and Ireland, many youth organisations and charities offer activities, services, and support to people under the age of 18. Similar organisations might also exist in your country, and they can be a valuable platform to connect with children who are usually under-represented in research studies.

At Big Motive we have conducted research sessions in the past with Voice of Young People in Care (VOYPIC) – an organisation that provides support and advocacy for children and young people who have a lived experience of the care system in Northern Ireland. These young people may live in foster care, residential care, or be otherwise involved with the social care system. This provided us with valuable insight into their specific needs for the service we were developing at the time.

Building and maintaining these relationships provides the appropriate connections to run future research sessions. This will ensure that the product being designed is fair and inclusive.

Fairness

Flexibility in your processes

"When researching with children, you have to throw your usual design process out the window and be completely creative with it again."

Fabienne Erben, Creator of Play for Health

When working with children, "you need to expect the unexpected", as stated by Sonia Livingstone from Playful by Design. The processes, products and services you design may not always work, but that's okay. Learning to adapt and 'go with the flow' is key to designing with and for children, and it's normal to not feel as organised as usual.

One good example is to not underestimate how long things might take; we need to allow children and young people the time to experience your product and sometimes this can take a bit of time.

You may also not get the straightforward responses or reactions that you would expect. Being flexible with your processes and allowing extra time and budget will help you to handle the unexpected and deal with any curve balls.

Rather than getting overwhelmed with the lack of structure, try to see it as an opportunity to be creative and think outside the box. Don't be afraid to go back a stage or repeat a step in the process either. It's better to take your time and be patient than rush to the finish line in order to get the end product right.





Growth

Consider the developmental moments

"It's hard to put kids in one bucket. There are so many differences depending on their age, and they change so much in a very short space of time"

Anonymous

We like to say that designing for children and young people is like designing for a moving target. We know that the developmental needs of children and young people can change in a very short space of time and we found that kids don't like to use something that doesn't feel relevant to them.

To create digital products and services for children and young people, it's advantageous to consider their developmental moments. As we mentioned, children who are the same age might not always be going through the same developmental stage, but it is good to have a guideline on what developmental stages children and teenagers are going through.

"To design experiences for specific age groups you have to really be aware of their understanding and analyse everything, from the user flow, to text, images and copy."

- Anonymous

When designing digital experiences for children and teenagers, it may be useful to look for milestones and design according to your audience's developmental stages, for example:

- When a child is able to perform advanced actions such as swipe, double tap or pinch.
- When a child is able to read and write.
- When a child turns 13 years old, the minimum age a child can consent for their own data.
- When a young person first gets their own mobile device or iPad.

Thinking about it this way helps to really understand how children grow, and how your product or service needs to evolve with them.

Growth

Empower kids to make their own decisions

"It's more than the interaction between a child and a computer system. Conversation needs to be brought in more. We must ask how are these interactions adding to a child's life? Is the experience helping this little human to flourish?"

Kruakae Pothong, 5Rights Foundation

Although we need to keep children and young people safe online, we must not take away their freedom and independence. Learning how to keep children safe while also giving them space and personal autonomy is essential.

As children get older and become teenagers it is important for their development to provide them with clear, neutral choices so that they can make their own decisions and develop their understanding of the world. Freedom and independence are also very important when exploring the interaction between product/user/family. Families could be encouraged to set boundaries together rather than offering discrete tick box interactions to gain parental consent.

Instead of enforcing crazy parental controls, try to enable healthy dialogue between a parent and a child, especially as children grow to become teenagers.

Parental support should change as children grow up. Consider that there may be moments in your product or service when children are likely to need more parental support than others, but as children and young people develop, their autonomy, independence and privacy expectations increase. This makes it crucial to think about how the role of parental support might change over time. They may need more attention and help at the beginning of their digital journey, but you need to know when you should allow children to roam freely using your product or service too.

Growth

Invisible and visible harms

"Children are going to have their data collected from them for their entire life. How do we manage that ethically over a period of time?"

Robert Hamilton, BBC

The digital world opens us up to a whole new dimension of both visible and invisible dangers to children and young people. The Ledger of Harms from the Centre of Humane Technology highlight some examples, which include cyberbullying, sexual exploitation and misinformation in addition to scamming and screen time. Whilst we may have the best intentions and want the online world to be a place where children and young people can grow, explore, play and socialise safely and securely, there are people online who don't have the best intentions for young users.

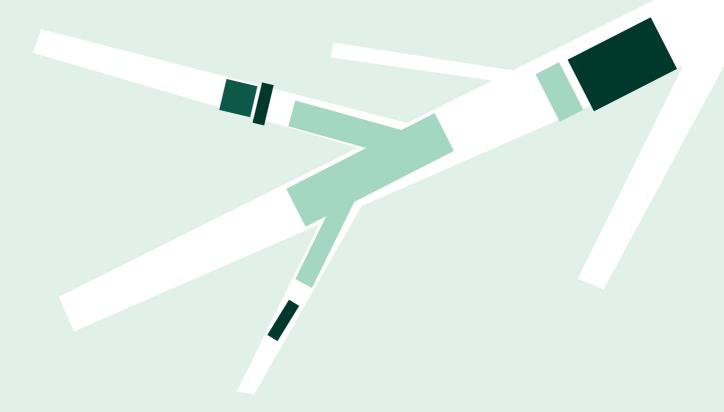
When we create products and services, we really have ask ourselves the question 'If this product or service got into the worst possible hands, what potential harm might it cause?'. This provides the opportunity to come up with a solution to prevent this harms from occurring.

This is where safety features are so important in digital product design.

We talked to Jack Pursey from SafeToNet who shared how their app deals with hidden harms like these.

"We can detect harmful content for people that are receiving it. This means that they are able to help people from being bullied online or from seeing sexually exploitative content."

Their safety precautions focus on protecting the child before those events have happened and making sure they are kept safe. Working with companies like SafeToNet can help to control 'invisible' harms and dangers that can occur.



Modern technology enterprises track their users and retain mountains of personal data – including that of younger users. From the moment a baby is born and their parent shares a picture of them on social media, their personal information such as name, date of birth and gender is revealed and stored. When discussing this issue with Robert Hamilton from the BBC, he offered a good question:

"Children are going to have their data collected from them for their entire life. How do we manage that ethically over a period of time?"

Children and young people's privacy is important and we should ensure our products and services are created this in mind.

Sarah from YEO messaging shared her experience of having her whole identity stolen online when she was younger.

"When I was 13 or 14 I had my whole digital identity stolen and had no control over it. I was completely gob smacked by some of the stuff that was being said that I didn't even know about."

In order to put the control back into the hands of the sender, Sarah created YEO messaging, a secure, private messaging platform that authenticates not just the device, but the intended recipient. It lets you decide who views your content, as well as where and when they see it.

Principle 4

Consideration

Listen to young users and seek to understand their feelings and their expectations to create digital experiences that meet all of their needs.



Consideration

Don't underestimate young users

"Every kid is smarter than we as adults think they are, that's the bottom line. They are capable of so much more and they are just becoming more informed and wiser every decade."

Colin Williams, Sixteen South

Most children and young people have grown up surrounded by technology, leading to them becoming more tech savvy than a lot of adults. Parents are turning to their children every day to get answers on how to use something. Although they may not have as much experience navigating the world, they are increasingly savvy technology users.

We shouldn't underestimate children. They are capable of more than we think and can have valuable input, especially when it's something they have spent their lives on. It's really important when we create products and services that we let their opinions be heard and really consider how we can apply what they say.

It's easy to assume that some topics are too sensitive to discuss with children and young people. We spend a lot of time protecting them from the dangers of the real world and try to prolong their innocence for as long as possible.

But in order to really make the online and digital world a safe space for the younger

generation, we have to approach the difficult subjects so that we can design a solution to the problem. We should also encourage and equip parents to be able to have better conversations with their young adults. The more we ignore these issues, the bigger the risk of using digital services or products.

"Don't assume there are things you can't discuss with children. You can ask the difficult questions; you just have to go about it the right way. In order to fix the big issues, you have to ask the big questions."

- Daral Williams, 5Rights Foundation

Involving guardians

"It's important not to let the parent intervene too much, as they might try to make sure their child succeeds at the 'test'."

Carolyn Chmielewski, Spotify Kids

Involving a child's family, guardian or carer in the design process can help the participants to feel relaxed and may lead to more effective findings.

When you include someone close to the child in the conversation, it helps put them at ease and ensures the natural dialogue that unfolds can provide a more in-depth insight into their views.

Carolyn Chmielewski from Spotify Kids uses this very technique to get the most out of the research process. For one project they asked the children to teach their parents how to use something. This simultaneously showed them how well the child understood something, what they liked and remembered about it, and the vocabulary they would use to describe it.

While involving the family can lead to better results in some cases, it's crucial you don't let 'helicopter parents' take over. These are the parents or guardians who take an excessive interest in their child's life. They often want them to be the best at something and can therefore skew the results.

Careful facilitation might help mitigate any biases and avoid parents leading the conversation. It's also important to remember that parents aren't always the primary carer for some kids. Try to determine if a grandparent, aunt, uncle or older sibling might provide more valuable insight.

Consideration

Embrace your inner child

"Take off your adult hat and prepare to get on the floor, get messy and adapt to their modes of communication."

Sonia Livingstone, Playful by Design

It's okay to let your professional mask slip every once in a while and let your inner child out, especially when designing for children. Whether it be for a 6 or 16 year old, learning to speak their language and adapting how we communicate with them is essential to the research process.

As highlighted by Frances Brown at Nightingale Design Research, we can forget what it's like to be a child. When it comes to designing for children, we need to be open to reconnecting with this part of ourselves, to interact with children more and to try and see everything through their eyes. A playful and curious mindset will help you remember what it feels like to explore with no specific in mind.

Understanding and reading a young person's body language is also a great insight into what they are actually thinking, as highlighted by Fabienne Erben.

"Children might say they like something, but their body language is different. You have to read their body language as children have a hard time expressing themselves." In some cases, children and young people don't want to feel like they are letting you down, so they might say the things they think you want to hear. Reading their body language is a window to see how they are actually feeling.

It is also important to remember that the motivation to complete a particular task varies considerably between children and adults. When engaging children in testing your product or design solution, remember that they might not know why or how they should be doing this, so you might want to find creative ways to incentivise them.

One good example we heard was when the team at Spotify Kids organised a fair, and gave children stickers each time they completed a task.

No right or wrong answers

"Have multiple ways for kids to contribute to the session. Conduct research in a way that gives children the opportunity to counteract your assumptions."

Daral Williams, 5Rights Foundation

Due to the structure of the education system, children may be familiar with environments in which their performance is being assessed. Feeling like they are being assessed can affect how much they participate in conversation, or how confident they feel to speak up about things they don't like in your product.

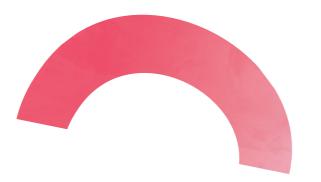
When engaging with children, think of ways to make them feel like there is no way to fail: it is not a test. Think of ways to make tasks into games, reward them for completing tasks or even set up a treasure hunt. These techniques will help to put children at ease, making them excited to get involved.

If a participant is shy or reluctant to engage in conversation, consider framing questions so that they are not the focus of the investigation. For example, try asking them what other children might do in certain situations, or how other children might react to a particular design. This allows them to think about the question in a new way, while you can still get the answers you need.

Try to make the research environment as friendly and as safe as possible. It's important for the facilitator to lead the session with a sense of enthusiasm, curiosity and fun. Children, like all research participants, will continually pick up on, and respond to non-verbal cues. Think of ways to set the right environment and mindset, and you will surely maximise engagement and achieve richer insights.

"We always start our research sessions with a fun warm up activity such as decorating name tags with fun stickers. This helps make the child comfortable in engaging with us."

- Carolyn Chmielewski, Spotify



Summary

Trust

Designing safer services for children should be aligned with an organisation's ethos and purpose.

Win stakeholder support.

It's important to have some expertise within your team to design for children and young people.

Gather the right expertise.

Giving young people a voice from the very start of the process, rather than waiting until the end.

Get input early and often.

During research sessions you want young people to feel comfortable, and most importantly, you want them to be safe. *Put safety first.*

The earlier you start to consider risks in your product or service, the better.

Be risk aware from the start.

Fairness

There is no one-size-fits-all approach to design for all ages.

Create age-appropriate solutions.

A child's experience of the world informs the way they perceive your product and/or engage with your research.

Recruit for fairness and diversity.

Schools, youth organisations and many charities offer activities, services, and support to kids in a variety of settings. **Build strong partnerships.**

Learning to adapt and go with the flow is key to designing with and for children, and it's normal to not feel as organised as usual.

Expect the unexpected.

Growth

The developmental needs for children and young people can change in a very short space of time, and the needs for each stage are going to change as well.

Consider their developmental stages and design for growth.

It is important to learn to keep young people safe while also empowering them to learn to make their own decisions.

Give them space and autonomy.

In order to develop an online world that is safer and secure, we have to understand what risks we need to design out.

Learn about potential visible and invisible harms.

Consideration

Most children and young people have grown up surrounded by technology, leading to them becoming more tech savvy than a lot of adults.

Do not underestimate them.

A child's parent, guardian or carer might be an important part of their experience of your product/service.

Get them involved.

When designing for children, practicing authenticity and curiosity will go a long way.

Embrace your inner child.

Children and young people are constantly put in environments in which their performance is being assessed, and they could perceive your research session as a test.

Remind them there are no right/wrong answers.





Conclusion

It's clear there's still a long way to go when it comes to making digital experiences safer for children and young people. This research study has surprised and, at times, delighted us when hearing of some organisations becoming increasingly aware of the issues surrounding the need for kids safety online – and to see the measures being taken to address this critical need in their product development practices. But there are many that still aren't doing enough. There are many organisations however, that have huge resources dedicated to developing experiences for young audiences that simply must do more in this emergent field.

The digital landscape will continue to change, and legislation will continue to evolve. Therefore, organisations must get ahead and take action before falling behind and risking negative consequences.

- "Perhaps in the future there might be a more ethical lens in how we design things"
- Georgina Bourke, ICO

As highlighted by the Centre for Humane Technology, many technology companies are driven by maximising growth and profits, with little concern for the wellbeing of the people that use their products and services.

The centre's mission is to shift technology towards a more humane future that supports everyone's well-being. This is something we all need to embody if we are to create safer digital products, particularly for younger and more vulnerable users.

By involving and engaging children throughout the research process, as well as taking on and embodying this new set of principles, we can become more empathetic and gain a better understanding of young users' expectations – enabling creative teams everywhere to create more responsible digital experiences that are not only safer but that support kids' development.

We hope this report provides inspiration for your team to consider the needs of young users more carefully. The insights presented here are just the tip of the iceberg as there are so many more incredible resources out there which have helped us immensely. Exploring what's been done before will help us learn how we can make the internet better, safer and more fair for young users.

The resources we have listed here are rich in detail and will guide you further on your journey to making the digital world a safer one for the children and young people of the world.

Sonia Livingstone and Krukae Pothong from The Digital Futures Commission are also currently working on an exciting new tool for designers as an addition to their Playful by Design' report which explores 'free play', an important aspect of a child's development.

"Our tool is an inspirational pack of cards that encourages designers to connect the dots between what they intend and don't intend to deliver. They can be used at any phase of design the process."

- Sonia Livingstone

Finally, while it is great to take inspiration and learn from existing products and services, there is no best practice that can be easily replicated when designing for children. Due to the ever-changing nature of the industry, and the particularities of each product or service, every experience calls for its own range of solutions.

Whether you've been considering children's needs for a decade or if you're just setting out on this journey, we wish you every success in your endeavours and hope that you'll keep us abreast of your progress.

Stay in touch. We would love to hear what you're working on.

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Rachel Orr ro@bigmotive.com

Resources

Books & Reports

Centre Of Humane Technology

Ledgers Of Harm (The Next Generations)

Ledger.humanetech.com/

Lego & Unicef

Responsible Innovation In Technology For Children

unicef-irc.org/ritec

Thomas Visby Snitker

User Research With Kids

Kids Included

Lego

kidsincluded.report/

Playful By Design -

play-in-a-digital-world/

Save The Children

Child-Centred Design

Free Play In A Digital World

digitalfuturescommission.org.uk/

esourcecentre.savethechildren.net/

document/child-centered-design/

CORE

Digital Futures Commissioner Fabienne Erben

4 Cs of online risk

Play For Health

play-for-health

fabiennerben.com/projects/

Sesame Workshop

The Missing Middle

the-missing-middle/

joanganzcooneycenter.org/event/

core-evidence.eu/posts/4-cs-of-online-risk#comment

Guidance

ICO

The Children's Code Design Guidance

ico.org.uk/for-organisations/childrens-code-hub/childrens-code-design-guidance/

TTC Labs

Responsible Tech Guide

ttclabs.net

D4CR

Rights Guide

childrensdesignguide.org/

Designing For Children's

Risky By Design

5Rights Foundation

riskyby.design/introduction

5Rights Foundation Making Child Online Safety A Reality

childonlinesafetytoolkit.org/

ICO

Age Appropriate Mindsets

miro.com/miroverse/ageappropriate-mindsets/

Data Privacy Moments

Workshops, Tools, Templates & Methods

miro.com/miroverse/ico-dataprivacy-moments/

Sesame Workshop

Playtest With Kids

playtestwithkids.org/

Artefact Group

The Tarot Cards Of Tech

tarotcardsoftech.artefactgroup.com/

Spotify Design

Ethics Assessment Workshop

spotify.design/article/investigatingconsequences-with-our-ethicsassessment

5Rights Foundation

Making Child Online Safety A Reality

childonlinesafetytoolkit.org/

Digital Futures Commission & 5Rights Foundation

Playful by Design Tool kit

digitalfuturescommission.org.uk/ playful-by-design-tool kit/

Assessements

Digital Futures Commission & 5Rights Foundation

Value of Child Rights Impact Assessment

digitalfuturescommission.org.uk/ blog/what-if-childrens-rights-wereanticipated-at-the-very-start-of-digital-innovation/

ICO

Best Interests Of The Child Self-Assessment

ico.org.uk/for-organisations/ childrens-code-hub/best-interests-ofthe-child-self-assessment/



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