Save the Children

PROTECTING CHILDREN ON THE MOVE IN ASIA

through Information and Communication Technology (ICT) and Social Media

Every child has the right to a future. Save the Children works around the world to give children a healthy start in life, and the chance to learn and to be safe. We do whatever it takes to get children the things they need – every day and in times of crisis.

Acknowledgements

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Tanglin International Centre
3rd Floor Strathmore Building
352 Tanglin Road, Singapore 247671
+65 6511 3160
www.savethechildren.net

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Cover: A child's drawing describing his migration experience.

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Contents

Definitions of key terms

Child As defined in the UN Convention on the Rights of the Child (1989), a child is any person below the age of 18 years. In the context of this report the word is used to denominate children, adolescents and young people.

Children on the move This phrase has been carefully selected for the context of this research to encompass as wide a remit as possible and is defined as 'children moving for a variety of reasons, voluntarily or involuntarily, within or between countries, with or without their parents or other primary caregivers, and whose movement might also place them at risk of inadequate care, economic or sexual exploitation, abuse, neglect and other forms of violence'.

Country of destination The country being migrated towards or the final location in which the migrant finds themself.

Country of origin Also known as the home country or source country, this is where the migrant has travelled from.

Country of transit A country through which migrants travel before reaching the country of destination.

Human trafficking The illegal movement of people, typically for the purposes of forced labour or commercial sexual exploitation and incorporating some level of both control and exploitation.

Information and Communication Technologies (ICT) Includes any communication device, application or platform which enables users to access, store, transmit or exchange information and to connect with other individuals or groups. In the present context this includes the internet, computers, mobile phones, tablets, and global positioning systems (GPS).

Migration The movement of people from one place to another with the intention of settling temporarily or permanently in the new location.

Social media Computer-mediated technologies that allow the creation and sharing of information, ideas, interests and other forms of expression via virtual communities and networks. Common examples pertinent to this study are Facebook, Twitter, Viber and LINE.

Stakeholder An individual or organisation that can affect or be affected by the actions, objectives and policies of another. For the purpose of this study stakeholders are those organisations providing services to children on the move and those with an interest in ICT and migration.

Executive summary

This study examines what level of access children who migrate in Asia have to information and communication technology (ICT) and social media platforms. It also looks at how these children are using communication devices and social media with the aim of utilising these findings to establish whether social media and technology can play a greater part in keeping children safe while on the move.

Focusing on children on the move in Bangladesh and Myanmar as source countries, as well as Malaysia and Thailand largely as destination countries, the study involved a total of 134 children through focus group discussions and surveys. Selection ensured that participants were within the correct age range and had migrated or were likely to migrate due to their family circumstances and location. In addition 38 research participants from NGOs, service providers, technology companies and academics took part in the study.

Among children who participated in this study, there is a notably high level of access to communication technology. About 1 in 2 children have access to mobile phones and 1 in 3 children use computers with internet access to communicate. In terms of ownership, about 2 in 3 children own a basic mobile phone or a smartphone. While 1 in 3 children have access to computers, fewer than 1 in 20 children actually own a computer or tablet. Children indicated that they were less likely to invest in tablets and other large-screen devices because they are fragile and likely to be damaged if dropped.

When asked about the nature of their usage of devices, children shared that their main use was for making phone calls and 82% of them keep in touch with their family members in this way. However, it was also found that even though they may own a communication device such as a mobile phone, children are not frequently using them to find information relating to safe migration.

Social media, in particular Facebook, YouTube, LINE and Viber, are used by children. Children favour applications that allow voice or video transmission rather than text, placing a great emphasis on both LINE and Viber. They also make great use of emoticons and 'stickers' which depict messages without the need for words and can be used over Wi-Fi, without the need for a mobile phone connection. Twitter has very low usage among children as it requires the use of writing, which poses challenges for those who cannot read or write. Social media does not currently play a major role in the migration of children in this study, although they are used to communicate with others who have already travelled.

The reality in the region studied is that, often, migration is part of families' livelihood strategies. In this context, the study also examines children's access to ICT and social media at each stage of their journey. Access and usage differs before, during and after their migration. Before migration and in the source country, access to technology is limited. Both computers and mobile phones do exist but are not widely used. Children in the study stated that accessing information is commonly

About 1 in 2 children have access to mobile phones and 1 in 3 children use computers with internet access to communicate.

Twitter has very low usage among children as it requires the use of writing, which poses challenges for those who cannot read or write.

done through landline phone, by asking family members, watching television and listening to the radio. From children's perspective, family members were identified as the most useful source of information when planning their migration journey. This is because in general people had travelled ahead of them and they used the experience of those who had gone before them to guide their own migration.

During their migration, children typically have with them a simple mobile phone rather than a smartphone. However children rarely use a mobile device to assist with navigation or information gathering while en-route. This is in contrast to migrants in other situations such as Syrians crossing into Europe, where migrants are likely to have better access to smartphones, be more digitally literate and be financially better off. 90% of the children in the study acknowledged that a mobile phone is a very useful tool when travelling and has a role to play in keeping children safe by allowing them to communicate with others. However only 59% of the children felt that access to ICT and social media could keep them safe.

Upon arrival at their destination, children very soon acquire access to a smartphone, using their first available funds to invest in one. Children highlighted that the smartphone is an extremely important asset for them and their family. At their destination children are better able to access and use the internet and smartphones due to better mobile signal coverage in urban areas as well as greater availability of technology and funds.

In the current market, there are many mobile phone applications for use by migrants, and technology is available for simple mobile phones to keep children on the move safe. This study, however, finds that no children involved in the study are using the applications available, nor are they being employed by migrants elsewhere, because these applications are not sufficiently targeted or are not well publicised. Moreover, there are very few applications aimed specifically at children on the move.

Based on these findings, the study recommends that interventions should be appropriate to the particular stage of the migrant's journey – before, during or after migration – and to the particular context of children on the move in Asia.

Before migration, in the source country, where children have limited access to technology, effective interventions are low-tech solutions such as games, theatre, folk art, cartoons and talking about the consequences of being separated from families, the risks of unsafe migration and safe migration strategies. In addition, before undertaking planned migration, children and their families should be supported to assess whether it would be in their best interests to migrate, taking into consideration potential risks during the journey and the consequences of separation. Should they decide to migrate on their own, children and families should be prepared through simple planning of what to do during and after the migration, considering why they are migrating and what

Upon arrival at their destination, migrating children very soon acquire access to a smartphone, using their first available funds to invest in one.

Children favour applications that allow voice or video transmission rather than text.

their aims are. Preparation should also include a plan for if things go wrong.

Similarly, en-route interventions need to be appropriate to the access and digital literacy of the child. Children told this study that they do not use mobile phones to navigate or to find out information about the route. Children on the move should be assisted to utilise information centres along their route to communicate their progress. Such centres should be identified by a logo known to children and should allow children on the move to provide an update on their movement to the source and destination, effectively checking into each waypoint along their journey, as agreed in their initial plan with relatives or friends.

The destination stage of migration is the one currently best served by innovations. Existing applications should be supported, focused and strengthened and solutions should be designed to link destination information applications to the source. Looking to the future, a comprehensive migration solution should be developed which links not only the source and destination but also the migrant as they travel along their route. Additionally, collaboration should be undertaken among organisations working in this space to develop the most effective and sustainable solutions to keep children on the move safe.

No children involved in this study are using the applications designed for use by migrants, nor are these being employed by migrants elsewhere, because these applications are not sufficiently targeted or are not well publicised.

1 Background

1.1 INTRODUCTION

Global migration is on the rise and children form a key part of the statistics. In 2015, there were 244 million[1] international migrants worldwide and Asia plays host to nearly 12 million of the world's international child migrants.[2] In the same year, there were 65.3 million forcibly displaced people of which 51% were children.[3]

Children move for a variety of reasons. These include moving to seek better living conditions and to escape conflict or distress. Children are particularly vulnerable while on the move; separated from their day to day support structures and in unfamiliar territory, they are at risk of exploitation and abuse, of being trafficked or even of losing their lives. For example, 2015 saw thousands of men, women and children from Myanmar and Bangladesh travelling across the Bay of Bengal and Andaman Sea, and this migratory route has recorded at least 800 deaths.[4] In transit and destination countries such as Thailand and Malaysia children continue to face protection challenges and limited access to services.

To mitigate the risks posed by unsafe migration, support and practical information must be provided to children, their parents and their communities so that the risks and opportunities opened by migration are understood before the journey begins. It is also critical that prior to migration, children are supported to assess whether it would in their best interests to migrate alone and the consequences of being separated from their family over an extended period. If children decide to move alone, they must be able to stay connected with their family during their travel and on arrival at the destination, have access to reliable information in their own language, and have a channel to call for help if needed. In this way information is able to take the place of the familiar environment and protective structures of home, offering a cloak of protection, and the opportunity to stay safe while on the move.

Children are particularly vulnerable while on the move; separated from their day to day support structures and in unfamiliar territory, they are at risk of exploitation and abuse, of being trafficked or even of losing their lives.

Simultaneously with the rise in migration numbers and increasing associated danger to migrant children, mobile and internet connectivity are growing worldwide, as mobile phone connections surge and ever more sophisticated portable devices and applications emerge. Harnessing the power of communication in the 'information age' has seen rapid developments in the reach, diversity and uptake of social media.

Organisations across a broad spectrum have started to work better, reach further and achieve more by linking people, business and services together using the interconnectivity of mobile devices and social media through the worldwide web. Software developers and technology companies are applying mainstream innovations beyond their conventional applications, conducting 'hackathons' and investigating how technology can be harnessed for greater gain in less obvious places.

Southeast Asia, in particular, is experiencing a rapid growth of internet, digital, social media and mobile phone activity. Internet and social media usage have

increased by more than 31% year-on-year in this region.[5] Much of this growth has been attributed to more widespread access to internet-enabled mobile devices. For a population of 644 million in Southeast Asia, there are 854 million mobile subscriptions, 339 million active internet users and 306 million active social media users.[6]

In a region with more mobile phones than people, this digital growth in Southeast Asia presents opportunities for children on the move to make informed decisions prior to migration and could help to prevent children from moving alone or being separated from their families if that is not in their best interests. For children who do choose to embark on the journey, or get separated along the way, Information and Communications Technology (ICT) such as mobile phones, internet and social media platforms provides the potential for children to keep in contact, stay safe and be reunited with their families. It also offers opportunities to access critical information for informed decision-making during the journey, to share this information with others and to help children navigate in a more meaningful way. Moreover, social media can empower children by carrying the voice of an individual far further.

However, it has to be recognised that along with the many opportunities presented by ICT and social media, advances in these areas also bring risks. High internet and mobile phone usage facilitates easier connection between people smugglers and vulnerable individuals, putting the latter at risk of deception and subsequent exploitation. In assessing how best to use such technology for the protection of children on the move, serious consideration therefore needs to be given to the safest way of doing so.

1.2 OBJECTIVE

This study aims to identify what access children who migrate in Asia have to ICT and social media and how they are using them, and to use those findings to establish how information and technology can play a greater part in keeping children on the move safe.

While the study assesses the feasibility of harnessing ICT and social media to keep children on the move in Asia safe, it is hoped that the findings will inform those with an interest in this field globally. The report is aimed at individuals and organisations working with children on the move and with an interest in how to harness technology to reach those who would benefit from its potential for protection.

The study provides an overview of the current situation regarding information provision to migrating children, and considers the key challenges and opportunities currently presented in this area. It shines a light on the access that children who migrate in Asia have to ICT and social media today and tells the story of what children think about using ICT and social media to keep their future peers safe while migrating between and within countries in Asia.

If children decide to move alone … information is able to take the place of the familiar environment and protective structures of home, offering a cloak of protection, and the opportunity to stay safe while on the move.

2 Methodology

2.1 OVERVIEW

This research adopts a mixed-method approach which includes data collection through child-focused questionnaires, focus group discussions with children themselves and semi-structured interviews with key informants. Field research was conducted between August and October 2016 in Bangladesh, Myanmar, Malaysia and Thailand.

2.2 CHILD PARTICIPATION

A total of 134 children residing in Myanmar and Thailand participated in the study through focus group discussions and questionnaires centred on their personal experience. Selection ensured that participants were within the correct age range and had migrated or were likely to migrate due to their family circumstances and location. A total of eight focus group discussions were conducted in various locations across Myanmar and Thailand, engaging 68 children who had migrated. Additionally, 78 child-focused questionnaires were completed, also in Myanmar and Thailand. 12 respondents who completed questionnaires had also participated in a focus group discussion, hence the total number of children engaged is 134.

The majority of children originated from Myanmar, from several different ethnic groups, namely Rohingya, Rakhine, Kachin, Karen, Karenni, Mon, and Tai Yai. Children originating from Thailand, Laos and Cambodia were also involved in the study. Children of both genders took part in the activities – the slightly higher number of females is attributable to two focus group discussions having taken place at a shelter for female victims of human trafficking. Ages ranged between 6 and 19 years old. Figures 1, 2 and 3 show the breakdown of the demographics.

FIGURE 1: NUMBER OF PARTICIPANTS BY COUNTRY OF ORIGIN

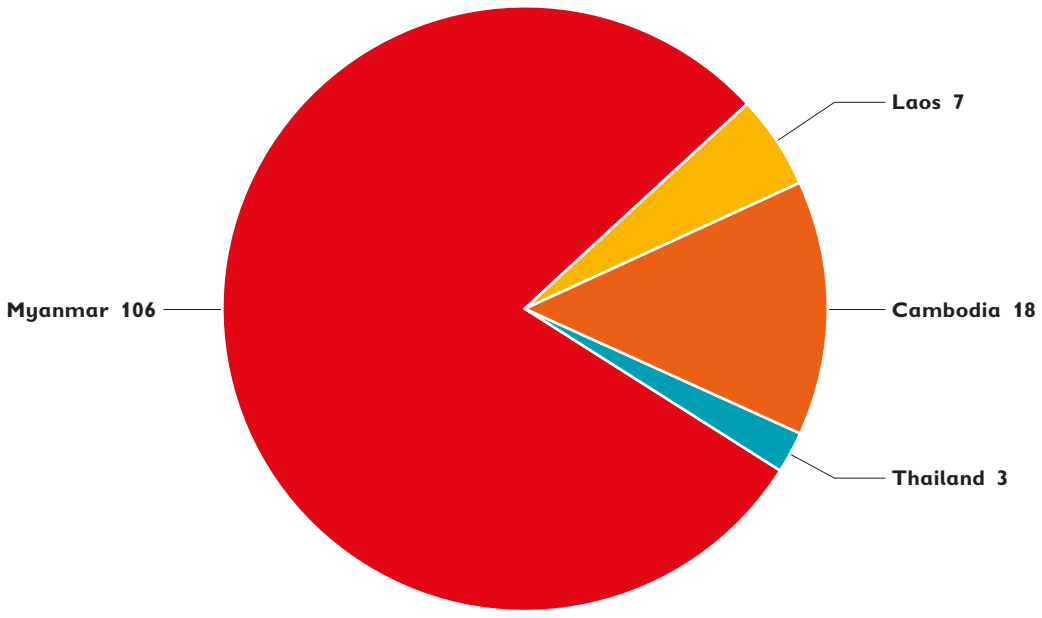


FIGURE 2: NUMBER OF PARTICIPANTS BY GENDER

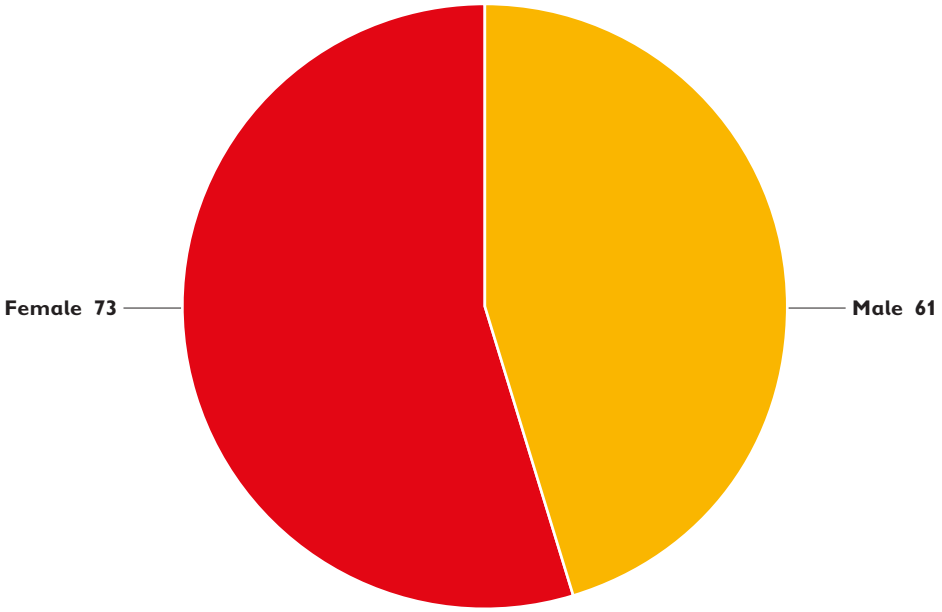
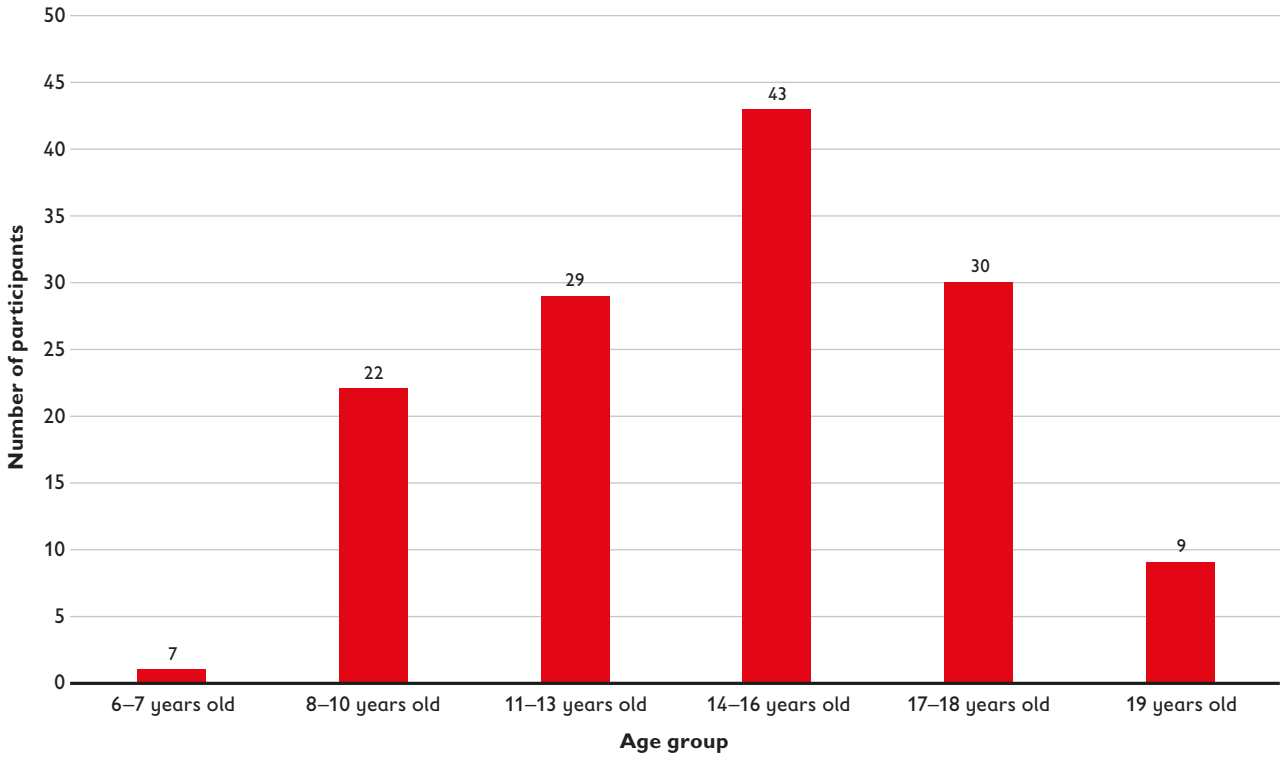


FIGURE 3: NUMBER OF PARTICIPANTS BY AGE GROUP



2.3 STAKEHOLDER INTERVIEWS

The study also engaged with many different organisations and individuals working in the fields of migration and technology. These included service providers, technology companies, academics and other interested parties. The aim of the interviews was to understand stakeholder perspectives on the current and potential future uses of information, ICT and social media to keep children safe while on the move. 38 interviews were carried out and the data gathered forms the basis for many of the recommendations in this report.

2.4 ETHICAL CONSIDERATIONS

The study took as its overarching guide the principles enshrined in the UN Convention on the Rights of the Child and sought at each stage of its planning and implementation to do no harm and to place the best interests of the child at its heart. Article 12 of the Convention, covering respect for the views of the child, was considered critical to the success of the study and accordingly child participation was sought from the outset.

Comprehensive strategies were developed and recorded for ensuring that the research team was appropriately qualified, trained and vetted to undertake the work; that each child participated voluntarily and that informed consent or assent was obtained. Suitable measures were put in place to support any child who became distressed through the activities and to ensure that participants understood the purpose of the research. Having drawn up these strategies, careful consideration was given to the need for the research and to any potential risk of harm to the participants.

2.5 LIMITATIONS

The timeframe for this study was three months. The study therefore focused on four countries in Asia, two of which, Myanmar and Thailand, were treated as primary countries in which full field work was conducted, and two, Bangladesh and Malaysia, as secondary countries in which work was only conducted with stakeholders and not with migrant children themselves.

Efforts were undertaken to establish a control group for the study, but due to the limitation of time, this was not achievable. The study did however sample across a broad range of different groups of migrant children in different locations to produce a diverse set of data.

The aim … was to understand stakeholder perspectives on the current and potential future uses of information, ICT and social media to keep children safe while on the move.

3 How do children on the move in Asia communicate and access information?

3.1 INTRODUCTION

The mobile phone is one of the most commonly used communication devices and has become part of everyday life for many people around the world. It has been observed that the uptake of mobile phones among children and youth is growing in general, regardless of location and economic situation. Recently released research indicates that global penetration of mobile phones (measured by the number of mobile phone connections divided by total population) currently sits at 66% overall. The figures for the countries in this study are considerably higher, with Thailand at 133%, Malaysia at 139%, Bangladesh at 74% and Myanmar (one of the youngest countries in terms of proliferation of mobile phones) at 93%.[7]

Trends show that children on the move will increasingly be using mobile phones, though until the present study there was little research evidence to support this focusing on children on the move in Asia. Frequent media references and reports have appeared detailing the considerable use of smartphones by migrants trying to reach Europe. In that particular context, there is evidence showing that 'migration by smartphone' in Europe is very prevalent, given access to technology, strong mobile signal coverage and the education, financial status and age of the typical migrant.

When people move away, they lose their physical connection and it is natural that people will therefore try to maintain connections using various means. Physical separation as a consequence of migration can critically damage the relationship that a child has with his or her family.[8] However, when opportunities presented by mobile technology and social media are harnessed, it is possible for an effective strategy described as 'teleparenting' to emerge. This reduces the distance between parent and child, and allows them to maintain their connection using ICT and social media. Some form of parental protection can continue, irrespective of physical separation.[9]

Lack of access to, or understanding of, ICT and social media can also result in a form of exclusion on arrival in the new location. As our everyday lives are increasingly entangled in activities and relations enabled by ICT, being digitally excluded can result in reduced access to relevant networks and social relations, jobs and other opportunities.[10] Digital inclusion allows children who move to settle more effectively in their new location by maintaining links with their families, relatives and communities.[11]

The fast pace of technological development and the contemporary ubiquity of mobile technology has meant that many devices used can transmit the added dimension of video as well as voice and text communication. This allows a more vivid connection between distant migrant family members than was possible in the past.[12] Most recently the growing availability of cheap voice and video solutions has allowed greater access to communication among those groups who cannot read or write.

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The increasing sophistication of mobile devices has been matched by a dramatic decrease in the cost of production. 2016 saw the world's cheapest ever handset begin shipping from India, priced at just 251 Rupees (less than US$4).[13] This is driving new connections, with global research agency We are Social reporting that there are 18 new mobile phone users coming on stream every second and that almost two-thirds of the world's population now own a mobile phone.[14]

The rapid penetration of mobile phone technology in less developed countries is further fuelled by 'leapfrogging', in which new technology removes the need for older technology such as fixed wire connections to ever be installed. In many less developed countries, therefore, for many people a mobile phone is their first phone, rather than it being an additional desirable item, as it has been in more developed countries. Added to this is the availability of free educational resources to mobile phone users: tools as simple as YouTube provide free education to children in rural agricultural subsistence areas where school attendance is not commonplace. It becomes apparent that a mobile phone is an essential item, and is well within the grasp of most people.

Existing literature demonstrates that by harnessing the potential of ICT and social media, children on the move in Asia should be able to promote their own interests and find ways to stay informed while on the move. When children and young people get access to useful information they are now able to share it with others with great ease and reach. Information can travel fast, far and wide across social media. Opportunities to access basic services, arrange travel and transport and understand danger or risks can be investigated using ICT before, during and after migration. Such application of ICT helps people acquire a more balanced understanding of the migration experience and therefore helps them realise the implications and repercussions of migrating.[15]

3.2 HOW CHILDREN ON THE MOVE COMMUNICATE

To understand whether children on the move are making use of communication technology, child participants were asked how they communicate with people in general. As shown in Figure 4, it was found that the means of communication used most frequently by children is the mobile phone. About 1 in 2 children have access to mobile phones and 1 in 3 children use computers with internet access to communicate. Evidently there is a generally high level of access to communication technology among the children who participated in this study. Even in more remote communities, children now have access to mobile phones. For example in the rural parts of Myanmar, the study observed that at least one person in a village would have a mobile phone which children could use.

FIGURE 4: CHILDREN WHO USE MOBILE AND LANDLINE PHONES, COMPUTERS WITH INTERNET ACCESS AND POST/MAIL[16]

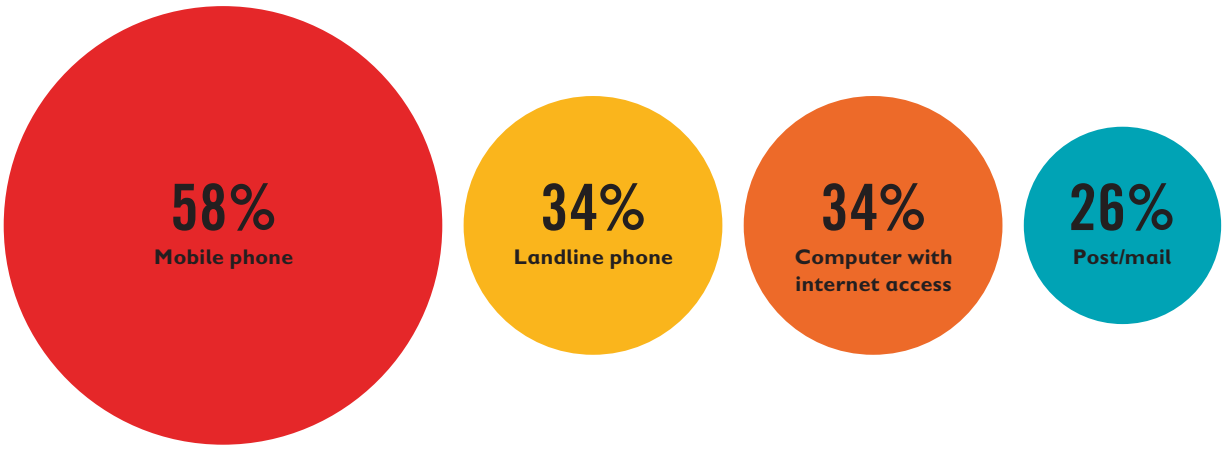
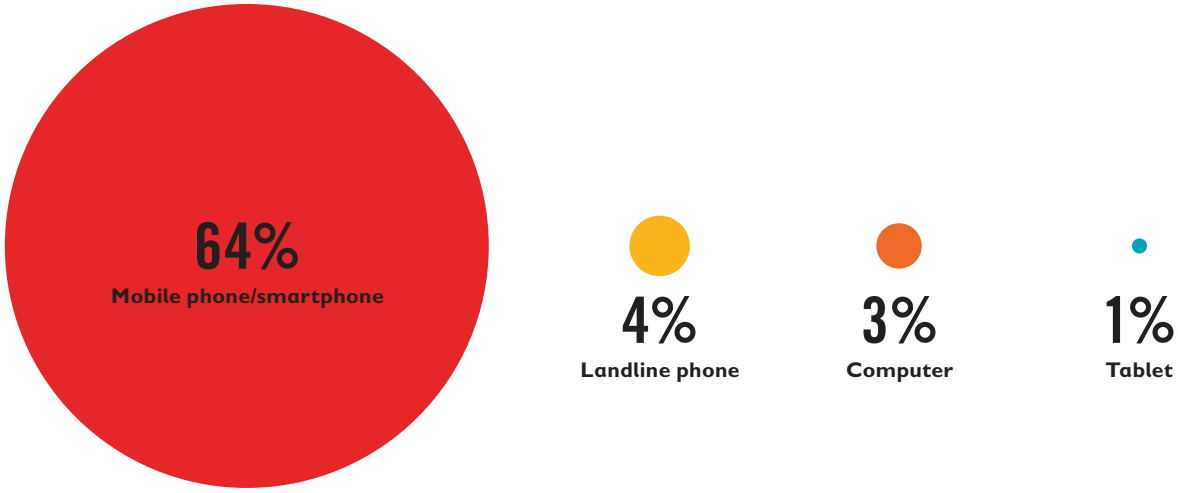


FIGURE 5: CHILDREN WHO OWN A COMMUNICATION DEVICE[17]

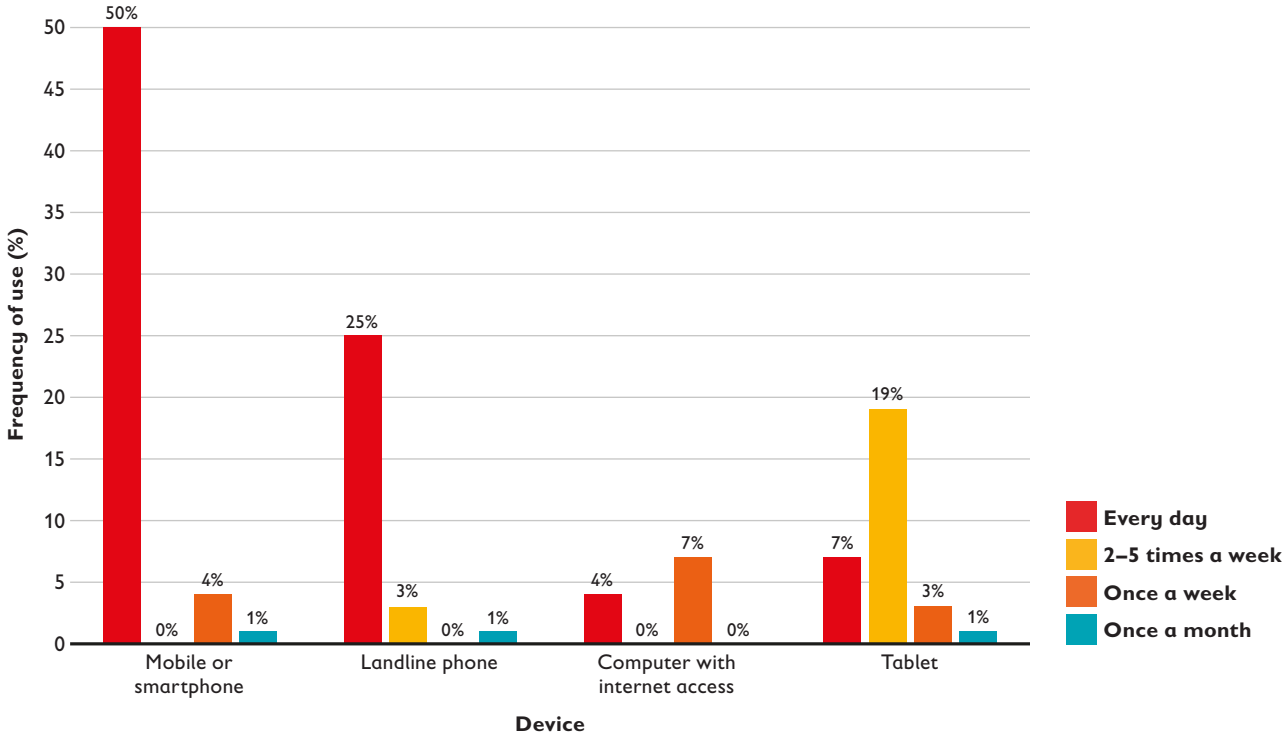


Children were also asked if they owned a communication device, as illustrated in Figure 5. About 2 in 3 children own either a basic mobile phone or smartphone. While 1 in 3 children have access to computers, less than 1 in 20 children actually own a computer or a tablet. Children indicated that they were less likely to invest in tablets and other large-screen devices because they are fragile and likely to be damaged if dropped.

3.3 HOW FREQUENTLY ARE COMMUNICATION DEVICES USED BY CHILDREN ON THE MOVE?

Children were asked about the frequency of their use of ICT and social media. Figure 6 shows that children with access to mobile phones and smartphones use them with great frequency, the vast majority at least twice per week. Although

FIGURE 6: FREQUENCY OF DEVICE USAGE[18]



there is access to landline phones and computers these are used far less frequently as children do not own them or carry them all the time as they do with mobiles and smartphones. Also while 1 in 3 children indicated that they have some access to computers, the majority do not have *frequent* access to them.

3.4 TYPES OF SOCIAL MEDIA USED BY CHILDREN ON THE MOVE

With the understanding that participants have access to communication devices such as mobile phones or smartphones, children were asked what social media applications they used. Children were shown logos of common social media applications and they recognised most of them. Lesser known applications such as Youku and Zapya were also mentioned. The data gathered puts Facebook on top as shown in Figure 7.

Highly significant in the data is that the five most commonly used social media applications do not require a written or text-based element of communication. For example, LINE is highly popular among children who participated in this study, followed by Viber. Both of these applications are predominantly voice-based, allowing users to record video or voice clips to send to their contacts. They also make great use of emoticons and 'stickers' which depict messages without the need for words and can be used over Wi-Fi, without the need for a mobile phone connection.

Such platforms are very popular with participants as they overcome the lack of reading or writing skills. They also enable younger users to express themselves without having to formulate sentences. This allows for a more personal form of communication and is a useful way to feel closer to others when separated by distance. Other applications such as Google Maps and Twitter have very low usage rates. Twitter, for example, poses challenges for those who cannot read or write.

3.5 ACCESSING INFORMATION BEFORE, DURING AND AFTER MIGRATION

The study subsequently asked participants to consider their use of ICT and social media, as well as more traditional information sources, at each stage of their migration. As shown in Figure 8, using a landline phone to contact people, asking family members, watching television and listening to radio were consistently identified as good sources of information in the source country before migration.

FIGURE 7: NUMBER OF PARTICIPANTS WHO USE SOCIAL MEDIA BY APPLICATION[19]

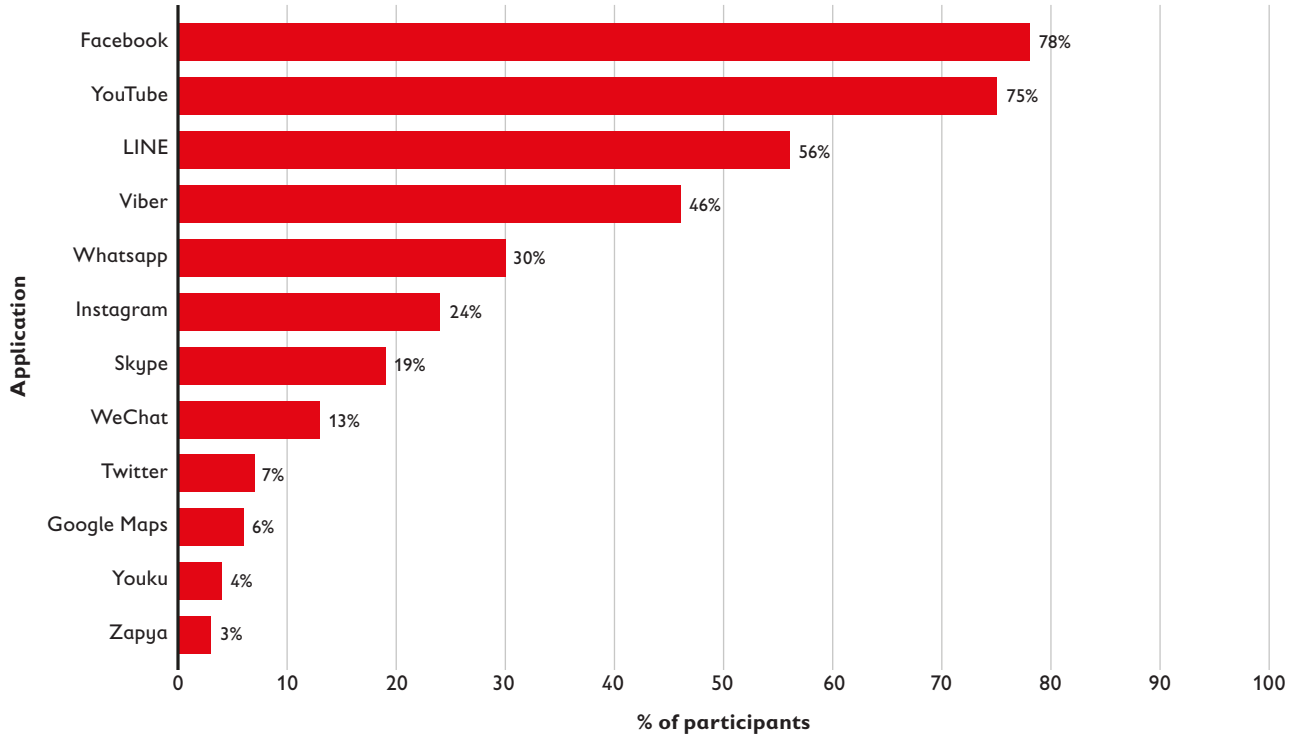
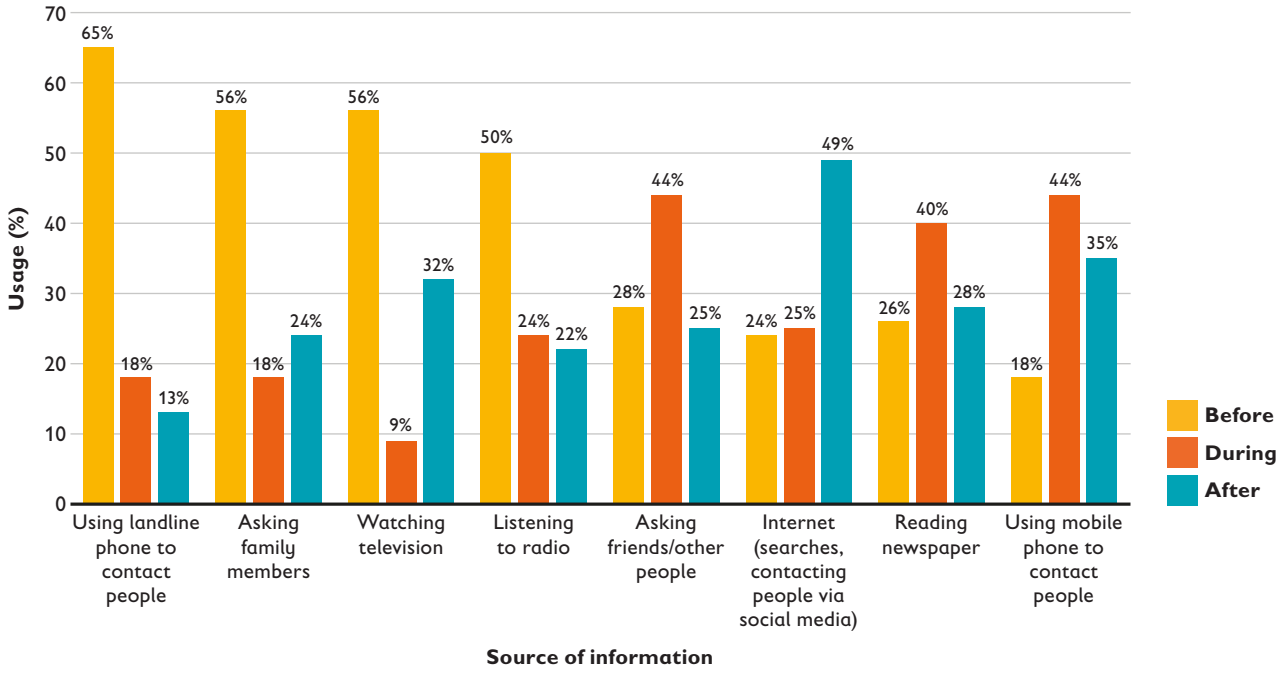


FIGURE 8: COMMONLY USED SOURCES OF INFORMATION BEFORE, DURING AND AFTER MIGRATION[20]



It was noted that very frequently a family member had travelled ahead of the child and that they served as a useful point of contact and information about the route and destination that lay ahead.

Participants indicated that during their migration friends and other people, as well as the mobile phone, were their primary sources of information. Newspapers also featured highly at this stage, while there was far less communication with family than expected. Some participants used the internet and radio at this stage of their migration.

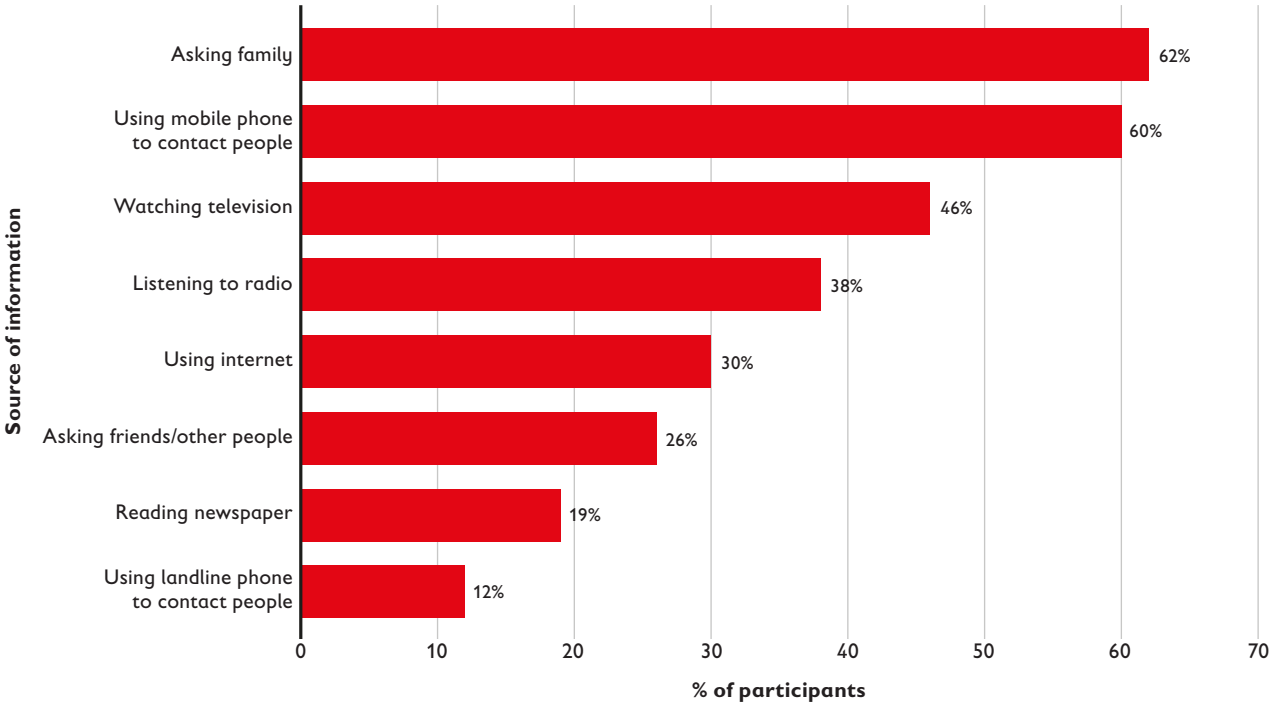
After migrating and upon arriving at their destination, respondents indicated that the internet, mobile phone and television were strong sources of information. Children informed that soon after arrival they were able to access funds from employment, other people or a charitable organisation, and that the first thing they would do with this money would be to buy a smartphone. Participants highlighted that the smartphone was an extremely important asset for their family. It is clear that at the destination children have better access to and usage of the internet and smartphones due to better mobile signal coverage in urban areas and improved access to technology and funds.

Children were then asked to identify which sources of information were most important to them in planning their journey and finding out about the destination country. Results are illustrated in Figure 9. As noted earlier, participants shared that in general people had travelled ahead of them and that they had used the experience of those people to guide their own migration. Hence, a majority of children identified family members as the most useful source of information when planning their migration journey.

"At each step of our journey we need the mobile phone. Without the mobile we can't reach the destination."

Ethnic Rohingya child from a group aged 8–12 years old who travelled by boat from Rakhine State and currently live in a shelter in Thailand

FIGURE 9: MOST USEFUL SOURCES TO GET INFORMATION ABOUT TRAVELLING[21]



Participants went on to explain the type of things that they would like to know about the journey, such as how to avoid risks, getting lost and being trafficked. They themselves raised such concerns and explained that they were able to talk to those ahead of them on the journey to establish whether or not the risks were there and if so how they should avoid them. Participants also explained that before migrating they would like to see what it was like at the destination, whether it was safe there and what opportunities there might be for them, and that they had used ICT, social media and asking other people to help them understand this.

> **"Using these things we can know in advance, we can easily see about the condition of the place before we go."**
>
> Ethnic Rohingya child from a group aged 12–17 years old living in a rural refugee camp in Rakhine State, Myanmar

4 What are children on the move in Asia doing with ICT and social media?

4.1 INTRODUCTION

This chapter explores how children and young people on the move are utilising ICT and social media, with the aim of identifying ways that service providers can better deliver their services as well as highlighting the risks involved when children and young people are more connected.

Technology developed by mobile phone service providers, ICT and social media providers now offers the potential to allow tracking and tracing of service users. This could be explored in terms of the ability for family to follow the movements of their loved ones, as well as for service providers to know when individuals enter an area which might warrant provision of a particular targeted service. This is however an area where caution is needed due to the inherent child protection risks.

Along with the many opportunities presented by ICT and social media, advances in these areas also bring risks. It is not uncommon to hear of individuals making contact with people-smugglers via ICT, building trust with the smugglers through video conferences and subsequently securing irregular migration to the intended country of destination, utilising a network of smugglers connected by mobile phone technology.[22] There have also been cases of ICT being used to track and trace vulnerable individuals, leading to their deception and subsequent exploitation.

However attractive ICT and social media opportunities appear to be, the double-edged reality is that people will use them for negative as well as positive purposes. Social media have been used as an illicit travel agency for agents looking to smuggle people, offering a range of products for migrants to browse, some even offering discounts and free passage for children.

Recognising the prevalence of such activity, some governments around the world have taken active steps to combat people-smuggling and trafficking. For example, the European Commission recently issued an advisory concerning the challenges posed by the efficiency of promoting smuggling through social media and recommended best practice of circulating counter-narratives on social media to warn people about potential risks associated with irregular migration and smuggling.

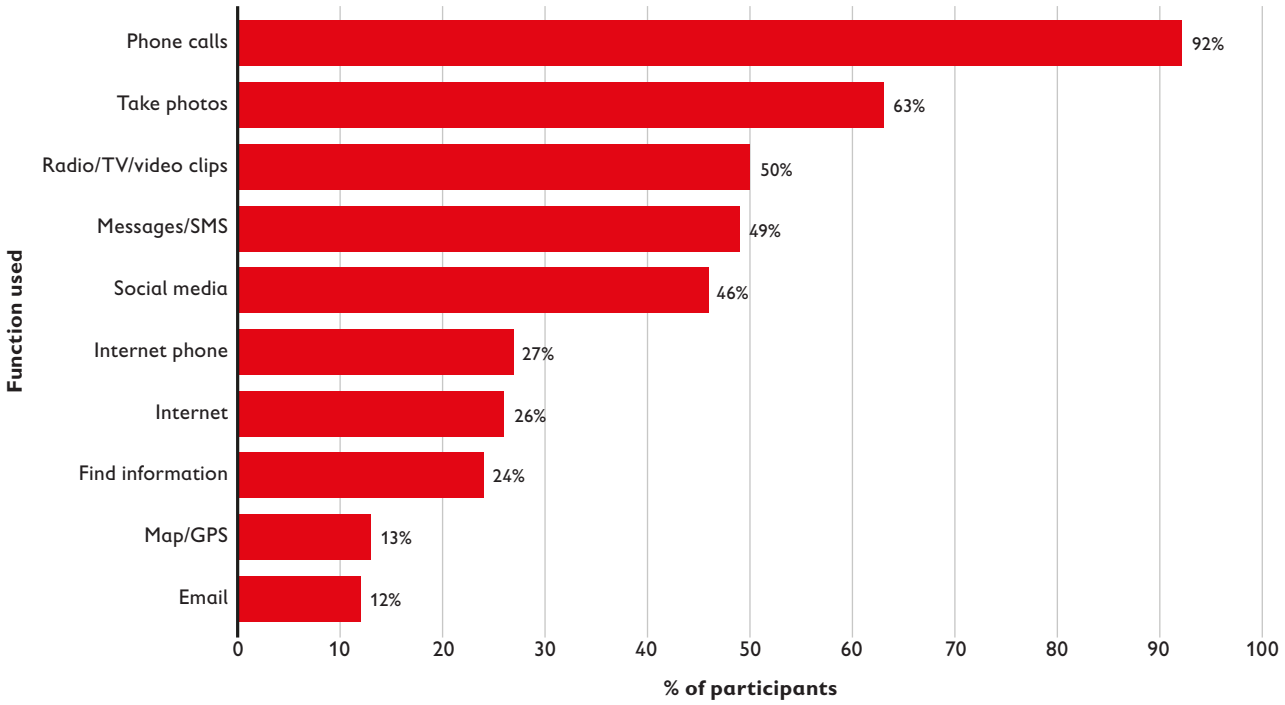
The following sections highlight what children and young people on the move do with communication devices and social media and the extent to which they stay in touch with their families.

4.2 ACTIVITIES THAT CHILDREN ON THE MOVE UNDERTAKE USING COMMUNICATION DEVICES

When asked about the nature of their usage of devices, children indicated that the main use of their devices was for making calls (see Figure 10). It can be seen that even after obtaining smartphones the majority of those surveyed do not use the device for tasks such as using the internet or sending emails.

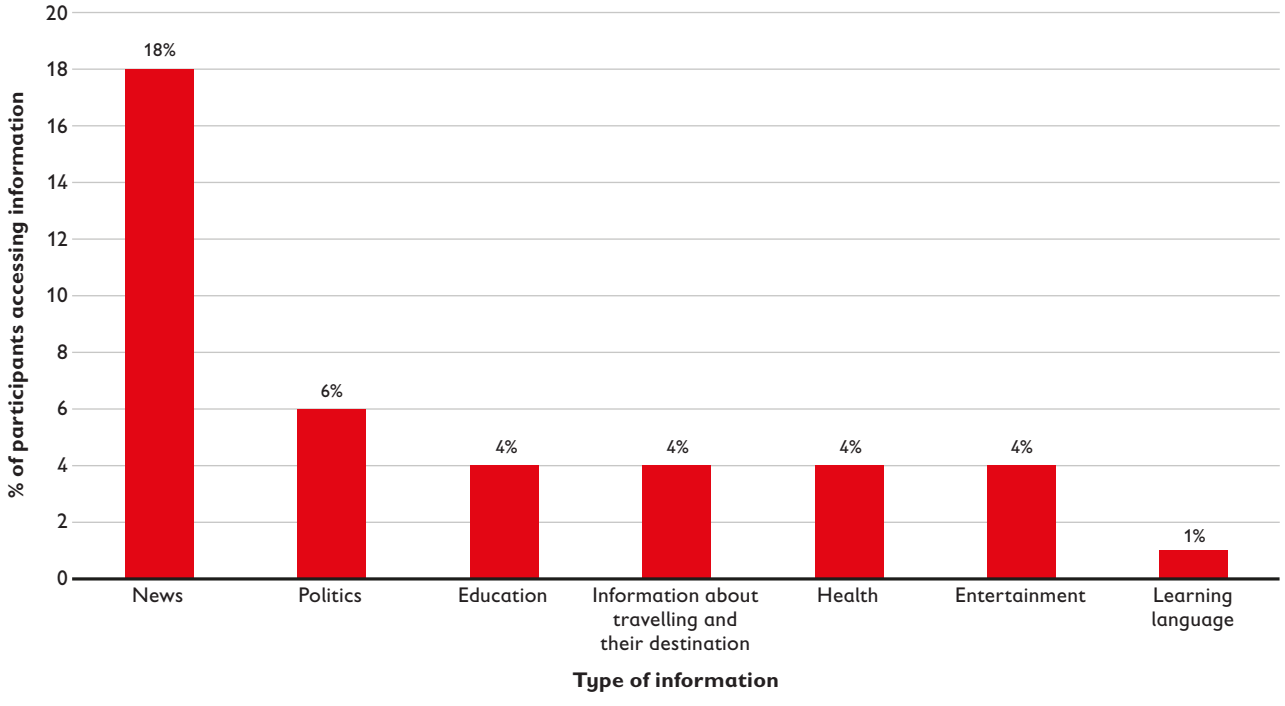
However attractive ICT and social media opportunities appear to be, the double-edged reality is that people will use them for negative as well as positive purposes.

FIGURE 10: FUNCTIONS OF ICT DEVICES THAT CHILDREN USE[23]



Taking photographs with a mobile is the second most common activity. Children also indicated that they watch video clips online and use text messaging and social media, among other things. It is important to note that even when children on the move have access to mobile phones they are not using them for finding information relating to migration, as shown in Figure 11. Children mainly used ICT and social media to access news and political information.

FIGURE 11: TYPES OF INFORMATION PARTICIPANTS USE ICT/SOCIAL MEDIA TO ACCESS[24]



4.3 STAYING IN TOUCH WITH FAMILY

Communication devices such as mobile phones are an effective way for children and young people to keep in touch with their families. During the study, participants were asked about their contact with family at home after their travel. Although the majority indicated that they did have regular contact with family back home, 45% said that they did not (see Figure 12). However, this should be seen in the context that some children questioned were in situations where they had lost contact with family, and others were prevented from regular contact by the rules of the places where they were residing (such as shelters). Others had migrated with, or to, a family member and so did not have anyone back home to maintain contact with. The study suggests, however, that where it is possible for them to do so, the majority of children on the move remain in contact with their families after migration.

The study also asked participants to elaborate on how frequent their contact was with family back home. Of those who were in contact, almost half had contact two or more times a week, and nearly two-thirds had contact at least once a week. This further reflects the wide access that children on the move in Asia have to communication, and to resources to fund such communication, following their migration.

Participants were also asked *how* they stay in touch with family back home after migration. Figure 13 shows that a large majority, 82%, of participants use the phone to keep in touch with family back at home. Just 3% used email to keep in touch with family. This is indicative of the limited availability of devices such as computers or tablets in the source country, so that even with access to technology at the destination, email cannot be used to communicate with home.

4.4 HOW USEFUL ARE ICT AND SOCIAL MEDIA TO CHILDREN ON THE MOVE?

Children were asked about their perceptions regarding ICT and social media. The research topic and purpose were explained to them and they were asked to consider whether, in their experience, they considered that ICT and social media were useful for children who were migrating and whether they believed that these things could enhance a child's safety while on the move. As shown in Figure 14, a significant majority agreed that ICT and social media were useful for children on the move. Participants were able to give examples of how they found this to be the case, explaining that the internet and social media helped them to find out what it was like at the destination, as well as back in the source country. Some answered that social media had now become a source of news, one saying that if people heard an emergency vehicle passing through their community they might turn to social media to ask what had happened.

FIGURE 12: PERCENTAGE OF CHILDREN WHO HAVE REGULAR CONTACT WITH THEIR FAMILY AT HOME[25]

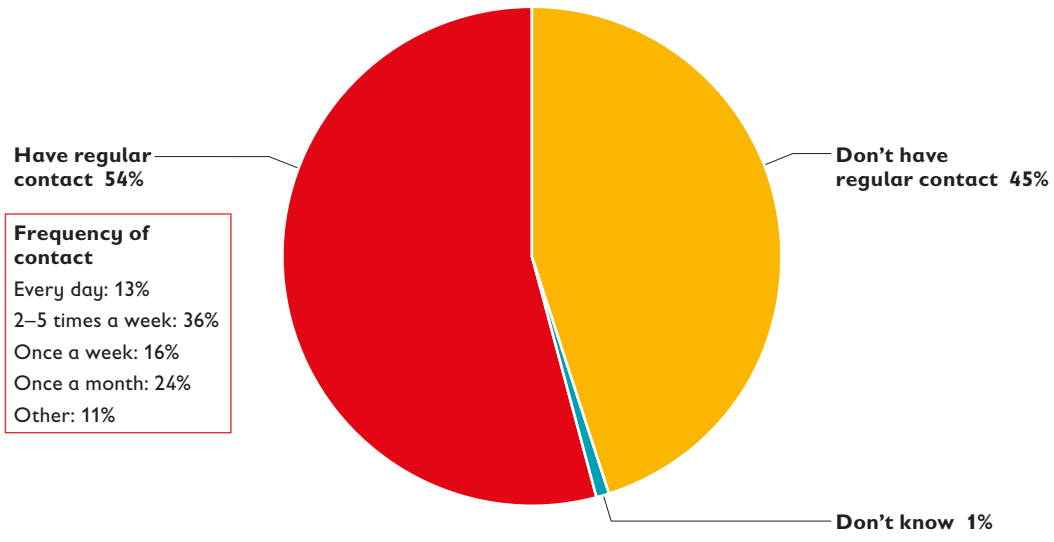
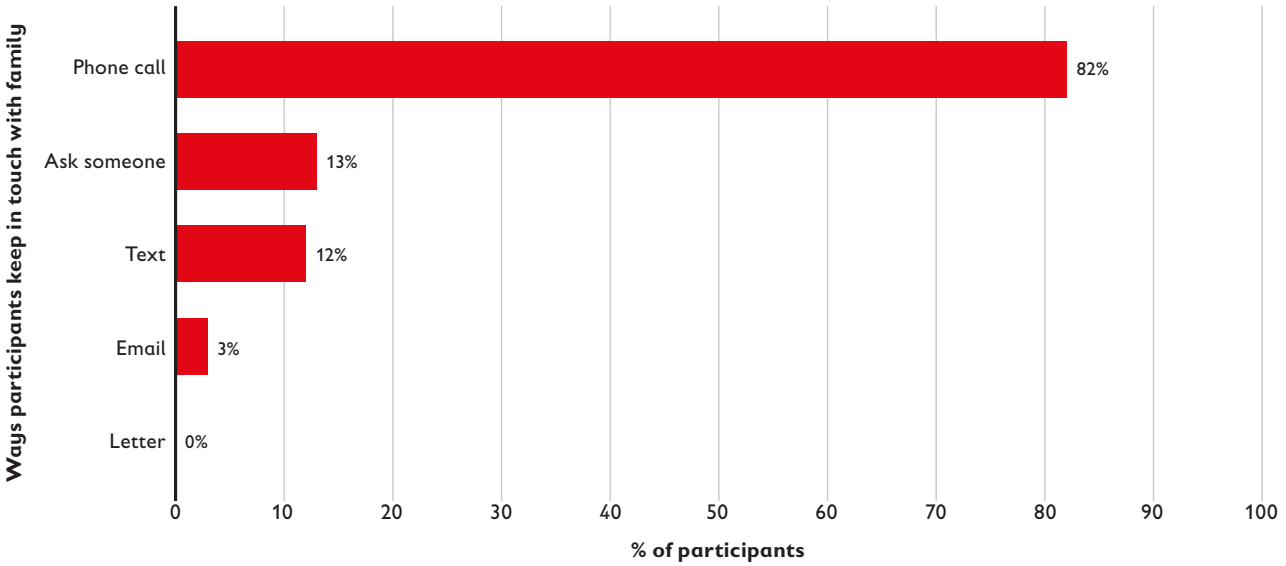


FIGURE 13: THE WAYS CHILDREN KEEP IN TOUCH WITH FAMILY[26]



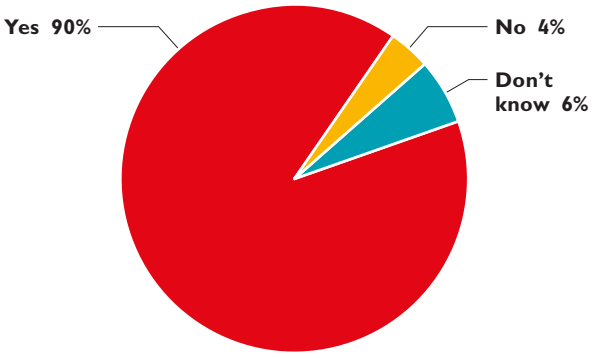
Children repeatedly raised the possibility of being able to find people via mobile phone when they got lost. They also said that they were able to tell their parents if something bad happened, and explained that they could easily check what was going on further along the route and find out about any danger. 42% of the children stated that they used ICT or social media to let others know where they currently were.

With regard to safety there was less clarity. As shown in Figure 14, the majority of participants still agreed that ICT and social media could keep children on the move safe but some struggled to understand the relationship between the technology and physical safety. Others argued that the devices were not always useful because they could not get signal or credit.

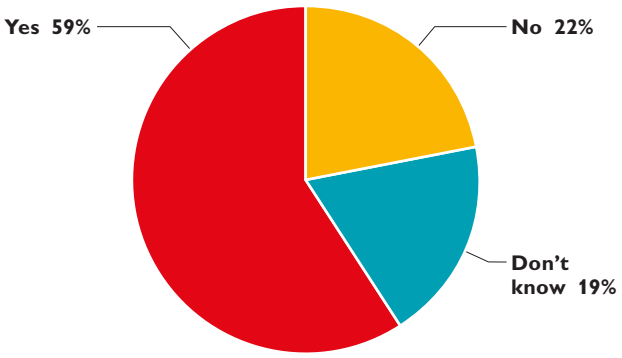
In summary, the findings indicate that children on the move in the Asian context do have access to and use ICT and social media to assist them while migrating. These children also recognise the value of doing so. The following chapter further analyses the dataset by synthesizing the interviews with 38 stakeholders, and considers the emerging trends.

FIGURE 14: CHILDREN'S PERCEPTIONS ABOUT ICT AND SOCIAL MEDIA IN RESPECT OF CHILDREN ON THE MOVE[27]

Do you think that ICT and social media are useful for children on the move?



Do you think that ICT and social media can help keep children on the move safe?



5 Analysis and emerging trends

5.1 INTRODUCTION

During the course of this study, some 38 organisations were engaged for semi-structured interviews regarding the research topic and to help answer the questions posed by this study. These discussions produced remarkably similar themes, no matter the scale or location of the organisation. This section of the report details the key themes which emerged from these conversations and those with child participants in the study.

5.2 ANTHROPOLOGY OF THE MOBILE PHONE

The most profound finding of this study is the consistent message from multiple sources consulted regarding the ever-increasing ubiquity of the mobile phone as an essential item. This was reinforced by children who participated in the study.

Back in 2007, Jan Chipchase, a researcher for Nokia, researched the anthropology of mobile phones among people across the world. He reported in a TED talk at the time that no matter where he went in the world one of the most common items to find in someone's pocket was a mobile phone. It had become more than just a convenience item, and was now something of human necessity.[28]

When considered ten years later and in the context of children on the move it was within reasonable expectation that a large number of the children engaged in this study would be able to show their mobile phones. A more significant finding was that among children in the context of migration mobile phones have become the most desirable asset to acquire. Although they spoke predominantly of simple features, and of using the phone primarily to call people, the children with whom this study engaged also spoke with clarity about the mobile phone being a tool of protection for them in its ability to connect them with family and friends at home, help them find safe passage, and assist them in identifying challenges and opportunities upon arrival at the destination.

In a 2016 article entitled, 'A 21st-Century Migrant's Essentials: Food, Shelter, Smartphone', the *New York Times* remarked that for the modern migrant ICT and social media have become essential tools. They are depended on for real-time updates about routes, arrests, border guard movements and transport, as well as places to stay and prices, and for keeping in touch with family and friends.[29] Although this study has not found extensive use of the morecomplex features of mobile phones, such observations, combined with the technology mapping conducted for the present study, speak to the potential for future development as access and digital literacy continue to improve.

In this study, children who did not previously own a mobile phone reported that buying one would be the first thing they would do on reaching their destination. The first money obtained, through support grant, wages or other means, would be used to make the purchase. Stakeholders repeatedly indicated that in instances of direct cash transfer (DCT) schemes, or in cases where children were

> **"Most important is the mobile phone. The mobile phone is number one."**
>
> Ethnic Rohingya child from a group aged 8–12 years old who travelled by boat from Rakhine State and currently live in a shelter in Thailand

given money to travel somewhere, the money would undoubtedly be spent on buying a new mobile phone or top-up credit to use the device.

This study finds that the proliferation of mobile technology, coupled with the perpetual decrease in costs, has resulted in the mobile phone becoming the primary tool in the migrant's pocket as they attempt to establish a better life elsewhere, even if it is only at the destination that widespread access emerges. The mobile phone is now a migrant need, not for its status, but for its utility value in keeping migrant children safe and connected to family and to information.

This study found that children who move have access to mobile phones before they have access to many other resources. Importantly though, despite the proliferation of applications to support migrants, children who participated in the study are not using their mobile phones in the same way as some migrants in other parts of the world. Simple usage is more common in the Asia region.

5.3 ACCESS TO MOBILE PHONES

This study finds that access to mobile phones among children on the move in Asia is high. Certain differences exist depending on the location, however in general people within this group have access to a mobile phone even if they do not own a device. Whether that phone is theirs and what generation of device it is varies somewhat, but there is access. Even in a country with the unique mobile phone history of Myanmar, where mobile phones only became accessible to the mainstream market in the last few years, there are now some 51 million mobile phone SIM cards registered in a country whose population is estimated around 55 million.[30] Myanmar has also seen a 97% (7 million people) increase in internet usage and 84% (6 million people) increase in social media users between January 2016 and January 2017, indicating that even in the youngest digital communities the pace of change in Asia is fast.[31] Stakeholders and children repeatedly told the study that even in the most remote areas there would be access to a mobile phone.

Limiting factors to mobile phone use include the ability to use the mobile phone in some areas because of a lack of GSM or data coverage, the technical specifications of the device, the need for credit or the limited understanding of the user. Such challenges are overcome however by

> **"A smartphone is the best because it is easy, you don't have to stop to use it and it has many games. It gives knowledge and communicates."**
>
> Cambodian child from a group aged 8–18 years old and currently living in a rice processing community outside Bangkok, Thailand

favouring access through free Wi-Fi and using social media applications which work without a mobile connection. Migrant children can choose providers who offer free access to social media (such as Telenor with Facebook and Viber in Myanmar),[32] or make use of Facebook Free Basics, also known as Internet.org, which is a platform allowing access to specific sites without a data plan, and even offline.[33]

Stakeholders indicate that even in places such as the refugee camps of Cox's Bazar in Bangladesh, where in theory it is difficult to own a mobile phone (due to the various documents required to obtain one), or the various shelters across the region which house returned trafficking victims, where mobile phones are taken from the migrants (ostensibly for their own protection), mobile phones are very prevalent.

5.4 ENSURING ACCESS TO A TRUSTED SOURCE

From the outset in this study stakeholders indicated that a key issue in consideration of the provision of information to children on the move was that the source was trusted by the user and was reliable. In recent years there have been reports of social media being either purposefully or inadvertently used to spread misinformation, for example during the Ebola outbreak in West Africa inappropriate cures circulated through social media, as did rumours that Ebola was spreading across the USA.

This issue has been identified by providers such as Twitter, who use a blue badge next to an account to let people know that an account of public interest

is authentic. Stakeholders repeatedly referred to a concern that users should be aware who the source of their information really is to avoid exploitation and abuse.

In Asia a common source of trusted information is through informal social networks of family and community connections. This is associated with a risk of trafficking, as families trust people through the network to take their children to the city, only for there then to be reports that the children have been placed in positions of danger at the destination.

Stakeholders indicated that in the delivery of their own services, children trusted information more if it came from their social media platforms. Children told the study that social media is now the place that people go to get trusted news – it is where people find out what is really going on. Distrust in media globally has buoyed usage of social media for news. There is clearly an inherent danger here of misinformation, as the same children told the study that social media can be 'poisonous' and that people can 'shout at each other' if one group dislikes another.

5.5 THE INHERENT RISKS OF ICT AND SOCIAL MEDIA

Along with the many and various opportunities presented by mobiles phones and social media, come the many risks that such technology presents. For some stakeholder respondents, fear of the risks outweighed even the potential benefits and made the topic difficult to consider or discuss.

In Bangladesh, for example, when discussing opportunities, stakeholders frequently referred to media accounts of young girls having been tricked, groomed, kidnapped or trafficked through the use of mobile phones and social media. Elsewhere concerns about child pornography were raised, with one respondent in Thailand describing cases in which poor families were being preyed on by paedophiles, and provided with the necessary means to display their own children on the internet for live sex acts to be performed.

The literature indicates that while East Asia and the Pacific account for nearly 40% of worldwide-detected child victims of human trafficking, children under 18 are often recruited using social media platforms and an estimated 25% of those reported missing in Indonesia are thought to have met their captors via Facebook.[34] Stakeholders also reported

> **"I can find out information about what is happening in Myanmar from Facebook and Google."**
>
> Burmese child from a group aged 9–14 years old and currently living in a fish processing community outside Bangkok, Thailand

that social media had been used to advertise for job opportunities overseas, when in fact the main purpose of the adverts was to traffic women for sexual exploitation.

Just as migrant children can harness the potential of mobile technology and social media, so can those who seek to do them harm. In considering how best to use such technology for the protection of children on the move, serious consideration therefore needs to be given to the safest way of doing so.

5.6 DEVELOPING CONTEXT-SPECIFIC INTERVENTIONS

There is a plethora of mobile phone applications available through the various online app stores and in the relief and development context developing an app has become something of a fashion in recent years. Echoing early 21st century advertising campaigns, there really is an app for everything. As one writer puts it, "Coding humanity's way out of crisis has become popular in recent years, pioneered in response to natural disasters. Apps for migrants to Europe are everywhere. But how much can they really help?", and indeed how much are migrants actually using them? There is even an app available called Refugee Emoji which allows users to utilise refugee-specific emojis, but there is little evidence that it is widely or effectively used.[35]

Donors are keen to invest in something which will produce a useful tool, and an app has the attraction of being part of the zeitgeist as well as being attractive to young people, relatively cheap to maintain and having the potential to reach a large audience. The topic of this study is not a new one and many have considered the possibility of harnessing technology to protect those in need.

As a consequence, over the years many apps have been developed, each with a distinct aim. However there is no evidence from this study that children on the move in Asia are using these apps, and in looking at the number of downloads of apps globally there is little evidence that migrants anywhere are making full use of the applications that have been developed to assist them.

Development practitioners have long been wary of the problems associated with replicating programmes across borders into situations in which they are no longer effective. In the early days of relief and development, much work involved replicating Western models into countries where they were ill-fitting, and then copying the project into other countries where they worked even less well.

This study finds that the same lessons have been overlooked in the context of app development. Of the over 50 applications specifically related to forced migration only a very limited number have any regular users at all, and of those that do only six have more than 1,000 users. This is significant and suggests the apps are either not meeting the needs of those they aim to help or are not widely enough promoted. While there are apps on the market that have appropriate languages available to users, others have been developed only in English. An application is only accessible if the intended audience can understand the language in which it is presented. The recently launched Indus OS is a mobile phone operating system that translates content and apps into 12 Indian languages, with culturally specific terminology and content. Such innovations are essential in making applications relevant and accessible.

As reported in *New Scientist* in April 2016, in an article entitled 'How to make apps that help Europe-bound Syrian refugees', the need for simplicity of solution is crucial, as is as the importance of understanding the context before jumping into developing an application. Many applications, they explain, are simply never downloaded. The article describes a 'hackathon' in which the winning solution simply used text messages. The developers in the hackathon clearly understood that, as found by this study, even with access to a smartphone many migrants are not using complex features or apps. They will use phone calls or voice transmission, text messages and photographs rather than GPS or migration-related applications. For navigation a migrant might rely on a photograph of a hand-drawn map rather than utilising mapping software, for example.

Understanding migrants' use of technology in the particular area of focus is essential to developing a solution which will be taken up by them. This study shows that while children do use social media the most popular are those which do not require the use of writing. LINE is a particularly favoured application among children on the move in the Asian context, as it can be used without a mobile phone connection (over Wi-Fi) and does not require the ability to read and write. LINE contains many expressive icons and allows for the transmission of short voice messages. YouTube was identified as a popular source of information, with respondents telling the study that they were able to use it to learn about all manner of things. Children also use other text and voice call apps such as Viber and Wechat. Notably Twitter, a text-based service, was very little used by children who participated in this study.

Critical to the development of any intervention is its relevance and suitability to the context. This issue was reiterated by almost every stakeholder participating in the study. IOM in Myanmar exemplified best practice when explaining their approach to information-based interventions across the various states of their host country. Although sharing one nationality the people of Myanmar are ethnically, culturally and technologically diverse. IOM, therefore, do not presume to know what is most appropriate for each different area. It engages groups in each area to design the information format which will work best in that area, given its distinct characteristics, for that particular set of migration challenges. This approach ensures that interventions are focused, relevant and contextually appropriate.

"It is good that you can share your location if lost and you can call for help, but also – people could steal your data."

Cambodian child from a group aged 8–18 years old and currently living in a rice processing community outside Bangkok, Thailand

5.7 SEEING THE VALUE OF LOW-TECH SOLUTIONS

Another theme repeatedly raised by stakeholders was the emphasis on using low-tech solutions where appropriate. Above it was noted that many applications or interventions have been developed and never used. This study finds that in many cases, this is due to their being contextually inappropriate for the setting in which they are intended to work. Time after time respondents indicated that for awareness-raising prior to departure, low-technology tools are the most useful.

Children respond particularly well to activities in which they are participating as well as receiving information. Role play and games such as snakes and ladders and ludo work particularly well in conveying messages in an entertaining way. Street theatre, drama and plays are also very effective in engaging people while delivering messages. These activities have been successfully used across the region, with some stakeholders reporting community members packing venues to see the shows. Such activities also attract younger people who frequently offer to get involved in running and participating in the activities themselves.

Such activities are especially effective in places where there is little other obvious entertainment, such as in more remote locations, as well as at camps for displaced people. Printed media has also been used to good effect, though with this comes the challenges of both language and illiteracy. Cartoons or leaflets containing many images have been used in Asia region. Stakeholders have produced and circulated exercise books and diaries for use by children containing key messages.

Peer-to-peer activities are another active way to engage young people. Rays of Youth and similar peer-led groups are well-established and active in Myanmar and Thailand. Children feel more comfortable discussing their life with a person of the same age. Some children remain in contact with other peers or young leaders using social media. Stakeholders reported that among children they work with, human interaction such as a phone call or face-to-face meeting is still the most preferred form of communication with a service provider.

IOM in Cox's Bazar spoke of the importance of considering the role of folk art forms in conveying messages for awareness-raising. The use of songs, dance, poems and drawing can effectively communicate important information regarding safety while on the move, in ways that make sense to and are of interest to the communities to whom a message is targeted.

5.8 PLANNING INTERVENTIONS FOR TOMORROW

While focusing on what is appropriate to the setting, it is always important to design projects for tomorrow, not today or yesterday. Stakeholders talked about important technology developments that can make use of simple mobile phones to provide more complex services than were traditionally available. This is particularly relevant in the middle section of a migrant's experience – the journey itself.

Innovations such as tailored SIM menus, flash messages and Internet.org are available to the most basic smartphone and can be harnessed to help keep children safe. Green SIM is a solution developed with specific users in mind, with the aim to provide rural farmers in Bangladesh with relevant agricultural information. It provides free voice and SMS messages with agricultural content and customers also have access to a helpline where they can speak directly with agricultural experts. The SIM card costs the same as any other, around US$1, but tailors a simple mobile phone to be an agricultural information source.[36] M-Power Social in Bangladesh suggests that a similar approach could reasonably be taken for migrant children, providing them with free access to information, advice and emergency assistance.

Mobile phone providers are also able to use a Call Detail Record (CDR), though issues of permission and data protection must be considered. A CDR is a record produced by a telephone exchange that documents the details of a phone call or other telecommunications transaction (eg, text message) that passes through that facility or device. These records can identify the movements or disappearance of groups of people. More modern devices are able to transmit a GPS location, but even with older devices, an individual's location can be identified through triangulation.

Solutions such as Flowminder can use simple mobile phone data to track migration patterns and routes.[37] Next generation connectivity solutions are being developed by organisations such as Ericsson Response, which will allow broader mobile network transmission and internet hotspots to exist where

services are not available today, such as at sea. So this study finds that in developing interventions for children on the move, it is important to plan to use tomorrow's technology, even if it is based on current devices.

5.9 CREATING CONNECTIONS ON ARRIVAL

It is in transit and on arrival at the destination that a migrant child can be particularly at risk, separated from family at the source and en route travelling companions. While transiting or at the destination, the migrant child needs to rapidly develop networks that will keep him or her safe. Access to honest advice, reliable employment, quality education and healthcare services are just some of the many needs of those arriving in a new place. In the context of South East Asia, the destination is very frequently a large city where in the absence of such connections a child can very easily be inveigled or deceived.

Over-reliance on friends of friends or distant relatives, and a tendency to use whatever service is immediately available can lead to poor choices with significant implications for the migrant child's future. It is at this point that interventions can be very effective in helping the individual or family to make the right decisions to help them to stay safe on arrival.

5.10 AWARENESS AND ORIENTATION

A further common theme in discussions with stakeholders was the need for young people – as well as their parents – to have more awareness of the internet before promoting further access to it. In addition to concerns about safety and security online, many stakeholders reported incidents of children being harmed through misunderstanding the internet. There is a perception in some quarters that children only see the bad side of the internet and that some sort of orientation needs to be provided to children in order to help them understand how the internet can actually be good for them, as well as bad.

More generally there is a feeling that just providing people with access to the internet does not help them to learn the basics which others take for granted, such as understanding how to use search engines, find information and avoid being scammed.

> **"If I go by boat I need to know who is on the boat and what are the conditions, because there might be trafficking issues."**
>
> Ethnic Rohingya child from a group aged 12–17 years old living in a rural refugee camp in Rakhine State, Myanmar

5.11 COLLABORATION

This study finds that a large number of organisations are undertaking similar work in developing initiatives in this field. With donors keen to provide funding, and a perception that investing time and effort in tomorrow's technology will deliver results, many stakeholders, NGOs, UN agencies, technology companies and others have considered the development of applications to help keep migrant children safe.

Stakeholders repeatedly told the study that they had intentions of developing work in this area and that the time now feels right. A key message from stakeholders was the need for collaborative working with partners who share similar interests and goals, to pool resources and skills and to work together towards the development of solutions.

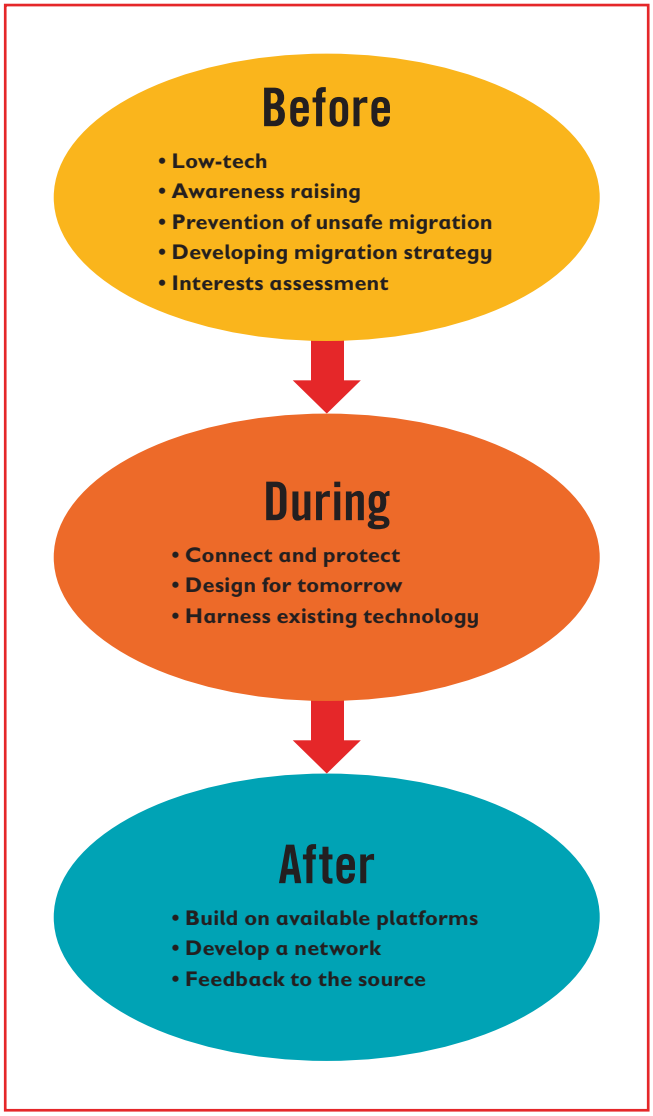
A significant amount of development has already been done, much of it open source, and all designed with the best interests of children in mind. And there is a great deal of will to work together to improve the lives of the target group. Working in isolation on this issue risks repetition, wasted resources, inappropriate interventions, and ultimately failing funders as well as the community we intend to benefit.

Service providers taking part in protecting children on the move through ICT and social media should be well prepared and equipped with the necessary technology to respond to the needs of children in a timely manner.

6 Recommendations

6.1 INTRODUCTION

Interventions should be appropriate to the particular stage of the migrant's journey – before, during or after – and to the particular context of children on the move in Asia. The various stages of the journey and appropriate interventions at each stage can be understood as follows:



6.2 AWARENESS RAISING, PREVENTING UNSAFE MIGRATION AND DEVELOPING A SAFE MIGRATION STRATEGY

This study has found that, in the region, a child who moves is likely to have less access to ICT and social media at the source than at other stages in their migration. They may have access to, rather than own, a simple mobile device. They may have access to newspapers, television and radio. They may have access to a computer but are currently not widely using the internet. The key to protecting migrant children before their migration is through awareness-raising activities. Children say that at this stage they want to know what might happen while they are travelling, what it is like where they are going, and what risks they should be aware of. They also want to know if there is anything to look forward to where they are going.

Recommendation A: Low-tech solutions for awareness-raising in areas of origin should be maintained, shared and promoted among service providers across the region.

There is a wide range of low-tech solutions being employed with great effect for awareness raising in the source countries. In order to be fully prepared before migration, children need to be made aware of risks, know where they can find support and care along the way and who to trust, understand the reality of migration and the legal and social systems they will find in transit and at their destination. Evidence from stakeholders indicates that the low-technology interventions described earlier such as games, street theatre, drama and plays are well received by communities, who enjoy participating in and learn from them.

Recommendation B: Further development should be undertaken of awareness-raising videos to be targeted at migrant children using YouTube.

Children on the move who participated in this study do not currently look for information about safe migration using ICT, though they may use social media to communicate with others already at the destination. The study has found that children use YouTube and watch video on mobile phones, and that video is a good medium for promoting migration messages. IOM-X is the organisation in the region most focused on this kind of video intervention and is a useful partner in this work.

Recommendation C: Interventions should aim at preventing unsafe migration and keeping families together.

The reality in the region is that, often, migration is part of families' livelihood strategies. Interventions should therefore aim at keeping families together and at preventing unsafe migration that puts children's lives at risks. Before undertaking planned migration, children, along with their families, should be supported to assess whether it would be in their best interests to migrate, taking into consideration the potential risks of the journey and the consequences of being separated from their family, should they decide to migrate on their own.

Recommendation D: Aspiring migrants should be assisted in developing a safe migration plan.

Following a best interest assessment, and if migration is assessed to be a better option, children and their families can be assisted in simple planning of how to prepare (including through awareness of the legal requirements they will be facing at destination), what to do during their journey and after they arrive at their destination, considering why they are migrating and what their aims are. There should also be a plan for if things go wrong. This can be as simple as a verbal discussion with family or friends. In communities where more advanced technology exists, applications such as Microsoft's Helpbridge should be used or developed in order to define a plan and set up automatic alerts for what to do in case of an emergency.

Recommendation E: Existing information centres should be harnessed to connect the source to the destination.

Many communities now have access to a central information point. For example, in Thailand and Bangladesh information centres have been established with the purpose of informing people about access to services and providing reporting mechanisms. These have been developed in efforts to promote universal internet access as well as more effective service delivery. Noting that a very significant majority of the migrant children engaged by this study have a family member ahead of them at the destination, such information centres should be harnessed to connect the source to the destination and through this link children should be given access to other children who have migrated before them.

6.3 KEEPING CHILDREN SAFE DURING THEIR MIGRATION

This study finds that in most cases someone has made the journey before the child migrates. During this stage of the journey, a child should be well-informed about the risks on the route and be able to maintain connections with those at their source and eventual destination. Effective planning and awareness before migration will assist this. Keeping in mind the variation in technology that might be available to the child, this stage should make use of information sources available.

Children told this study that they do not use mobile phones to navigate or to find out information about the route. They do not have smartphones or use applications during their journey, though this may change as prices drop and digital literacy rises.

In the majority of circumstances discussed with stakeholders and children during this study, it was apparent that information centres exist along the route. The literature also suggests that entrepreneurs have set up cyber cafes or one stop shops on frequent migration routes. Such centres are used by migrants to top up or charge mobile phones, use email or access the internet.

Recommendation F: Migrant children should be assisted to utilise information centres along their route to communicate their progress.

Such centres should be identifiable by a logo known to children and should allow children on the move to provide an update on their movement to the source and destination, effectively checking into each waypoint along their journey, as agreed in their initial plan with relatives or friends. This could be by simple email. In a higher-tech situation, for those who have access to smartphones, several applications now exist, such as Kricket and Northern Light, which will track the migrant's movements. These applications also provide real-time information to migrants about services as well as risks and dangers on their route. A more 'active' solution is the harnessing or development of technology used by the application Companion,[38] which tracks a user's movements and shares them with their chosen companion, who can monitor and ensure that their friend reaches the selected destination.

Recommendation G: Technology should be further explored which works with simple mobile phones.

This study finds that children on the move are more likely to have with them an older-generation mobile phone rather than a smartphone. The earlier referenced example of the Green SIM is able to transform a simple mobile phone into a migrant-specific handset, and also provides a facility for a helpline. This could give the migrant location-specific information and offer lists of mobile phone accessible applications and websites detailing appropriate organisations for migrants to get in touch with during their journey. Free access sites such as Internet.org should also be better publicised and utilised by those providing information to migrant children.

Technology also exists to allow for simple tracking of older mobile phones, but developing such tools requires an exploration of privacy and protection issues and would require the consent of the party being tracked. For those who have been trafficked or exploited along the route, a simple alert or hotline system should be developed to report the incident. This is available in applications such as Companion but is also available in the far more simple devices detailed earlier designed for tracking children. M-Power Social in Bangladesh has a keen interest in this area.

Recommendation H: If children are housed in shelters or detention, they should be allowed to maintain contact with their families.

Children told this study that not being able to keep in touch with their families is extremely distressing and causes them to feel unhappy. There were reported cases of children escaping from shelters, further increasing their vulnerability, because of the impossibility of communication with their families.

6.4 MAKING THE RIGHT CONNECTIONS

The destination stage of migration is the one currently best served by innovations. In particular, in Europe, but also very well exemplified by the Kolorob Project in Dhaka, Bangladesh, mobile phone applications have been successfully used to connect people to the services they need, such as healthcare, jobs, impartial advice and education. This study has found that by the destination stage most children are likely to own or at least be able to access a smartphone, so this is the stage at which smartphone based interventions are most appropriate.

Recommendation I: Currently available applications providing information about services at destinations should be reviewed, supported and enhanced.

None of the applications considered by this study is solely child-focused and more development should take place in that area. Organisations that provide information about services should make sure that the detail of such services is regularly updated. Also, service providers that share their information publicly should be ready and have full capacity to serve those in need. The Kolorob application developed in-house by Save the Children is a good example of how such apps can work and should be given further support and funding. It is also important to ensure that service providers are not obliged to report irregular immigrants, families and children. If children and their families are fearful of being reported, they will not access critical information about available services.

Recommendation J: Looking to the future, destination information applications should be further developed to connect each stage of the migration, creating a comprehensive migration information solution.

In considering the speed of mobile take-up and ever-increasing digital literacy among children on the move in Asia, further work should be explored with the developers of destination information applications such as Save the Children's own Kolorob application, to develop its reach to those who remain in the source country.

This kind of system is very well exemplified by the forthcoming Tripadvisor-style application being developed by The Issara Foundation in Myanmar and Thailand, which allows migrant workers in Thailand to feedback about working conditions to those back home in Myanmar considering the same journey. Developing the capacity of such applications would allow those at the source to get in touch with those at the destination.

Such applications should also consider connecting those on the move to the destination and source, allowing all with access to the application, whether on the internet at the information centre at the source, or on the smartphone destination information app, to monitor the progress of relatives along the route.

Recommendation K: Collaboration with others should be undertaken in order to develop the most effective and sustainable solutions.

A clear finding of this study has been a need and desire among stakeholders to collaborate more. Many different organisations across the region are working with children on the move, and many people around the world have developed technological solutions for migrants.

The mapping exercise conducted for this study (see Annex) shows that there are currently many solutions which are overlapping, as well as many which are underused. There is a great diversity of funding and technical expertise and this is likely to affect how successful an application is. Above all, development of solutions needs to incorporate an understanding of the context to which they apply. One of the reasons that some applications receive less interest is that they duplicate what others have already done. Another reason is that they have less funding than others. Bringing the best practice together, using some of the existing platforms identified by this study, and collaborating on keeping children safe, will yield more effective and more sustainable solutions for children on the move in Asia.

Coming together and utilising collaborative structures such as Liberty Asia's Freedom Collaboration[39] for NGOs, Techfugees[40] for the technology community, the Refugee Futures Initiative[41] which is a science-driven initiative, or Nethope[42] which is a cross-sectoral solution, will be invaluable for future programming in this area.

All of these platforms share the aim of alleviating the challenges faced by migrants through collaboration and technology development. Taking advantage of these, as well as platforms such as those documented above, will make for more durable solutions to shared problems and keep children on the move safer.

Annex A: Mapping of technological innovations for migration

A.1 INTRODUCTION

Having established why and how children on the move in Asia currently utilise ICT and social media, a global mapping exercise was undertaken to establish what technology innovations were currently available to support people on the move and understand whether and how these could be mobilised to better protect children on the move in Asia. When mapping innovations such as mobile phone applications and relevant web-based resources in the field of migration, it soon becomes clear that much work has been done in recent years to harness the potential of the internet and mobile phone applications to assist the safe passage of migrants worldwide. But it should be noted that no child participant involved in the study was using any of the innovations described below.

For the purposes of this section of the report, 'innovations' describes mobile phone applications, pieces of software, websites and other platforms which seek to make migration safer. Even when the list is focused as it has been for this study, it still numbers in excess of 50 innovations specifically aimed at keeping migrants safe. These are detailed in Annex B.

The innovations broadly fall into four categories – those that serve to assist (1) before, (2) during and (3) after migration has occurred or if someone has gone missing, and those that (4) seek to provide general information about migration, including stories of travel and human trafficking issues. In addition to these there are numerous open-source platforms which are ready to be built on and are aimed at creating information-based resources for both migrants and their service providers. The number of innovations for use before migrating is significantly fewer than those available during and after migration. This reflects the lower levels of access to ICT for many migrants before travelling.

A.2 INNOVATIONS FOR USE BEFORE MIGRATION

The small number of innovations aimed at migrants before they travel are of the informative type, helping an aspiring migrant to plan their migration and to set up emergency plans should something happen along the route. The websites *Telling the Real Story*[43] and *Surprising Europe*[44] both aim to inform prospective migrants of the realities of migrating. They use a variety of media including handwritten stories, spoken accounts, video and music to convey stories from people who have migrated, to inform others of the dangers that lie ahead, and to offer some perspective on the reality of the journey they are considering making. *My Life as a Refugee*[45] is a mobile phone app developed by UNHCR which aims to educate potential migrants as to the difficult decisions and choices they will have to make if they undertake migration. This is also useful as an awareness-raising tool for the general public, and those unfamiliar with the concept or reality of forced migration.

The majority of innovations at this stage are preventative, seeking to stop people from making the journey in the first place. *Surprising Europe* has an entire series of short TV episodes on a wide variety of migration journey topics. Utilising film media is seen as a way to communicate through relatable characters that transcend language and convey messages more clearly than can be achieved through text. A message can easily be repeated and shared from one location to another, dubbing into different languages as required.

Recognising this, the Australian government has produced a $6m feature film aimed at asylum seekers, about the futility of investing in people smugglers, the perils of the trip, and the hard-line policies that await them if they do reach Australian waters.[46] The Australian authorities have previously

produced a short video, delivered on YouTube and widely promoted worldwide, portraying Naval Commander Angus Campbell warning asylum seekers, explicitly including migrant children, "…you will not make Australia home".[47]

More progressive messages have also been effectively delivered using video, notably by IOM-X, a new innovative campaign from the International Organisation for Migration to encourage safe migration and prevent human trafficking using technological innovation and media.[48] IOM-X has produced various YouTube videos promoting safe migration.[49] One currently in production is an interactive series which will be screened on YouTube and will allow viewer interaction by voting on the plotline. Such interactivity is important in engaging the audience and making information exchange more meaningful. IOM-X is also developing mobile phone applications for awareness-raising and information for migrants before they travel.

Also in development is a mobile phone application from the Issara Foundation in Myanmar, to be called Golden Dream. This unique product, which is currently in the testing phase, is the product of much research and development and will act as a Tripadvisor-style of mobile application, allowing migrant workers who have travelled from Myanmar to Thailand for work to report back to those considering migrating on what conditions are like within the various places of work.[50]

Microsoft's Helpbridge is a free cross-platform mobile application (Windows Phone, Android, iOS) that provides users with the ability to send status updates to pre-selected contact groups via email, SMS, Twitter and Facebook, as well as developing an emergency plan for what to do in case something goes wrong, and location sharing with chosen contacts.[51] All of these innovations allow for a more informed and better planned migration strategy in which parents can play a part in ensuring that their migrant child is as safe as can be, having left the family home.

A.3 INNOVATIONS FOR USE DURING MIGRATION

The innovations currently available for migrants during their migration include informative services, but more interactive elements are also present, such as real-time mapping and the ability to leave a trail for family, friends or others to follow. Sole Connect,[52] Refugee.zone[53] and Kricket[54] all allow for route tracking and for markers to be placed for others to follow.

Northern Light[55] allows users to provide location updates to others, including opportunities or dangers on the way. The database is then able to develop positive or negative spots on the route and other users can decide whether this location is a good place for them to travel through.

Other applications such as RefuGPS,[56] which is primarily aimed at those travelling by boat, allow for offline GPS mapping. Such tools have already saved lives – it was reported in 2015 that a Syrian man described to the International Rescue Committee how he used his phone to try to contact the Greek coast guard when his boat was sinking, using precise GPS coordinates.[57]

There is an array of applications allowing the ability to access services and support along the route, and connecting migrants with people who would like to offer them assistance. There is provision for the ability to plan for the arrival at the destination by, for example, explaining the process for seeking asylum or getting other assistance in the country to which they are headed. Refugee Phrasebook Interactive[58] is an offline application, similar to InfoAid,[59] both of which provide assistance to migrants trying to communicate in unfamiliar languages, making use of their native language as well as images.

A.4 INNOVATIONS FOR USE ON ARRIVAL

The most numerous group of innovations is those intended for the migrant upon arrival in their new location. These innovations all tend to be very similar and can be broadly defined as 'destination information applications'. These applications range in quality and complexity, reflective of the budgetary and technical constraints under which

they have been developed. However, they essentially have the same general purpose, which is to connect the unconnected to the services and support systems they need at the new location where they find themselves.

These are clearly limited in their scope to the location in which they are developed, but can be copied across to other locations. More than ten of the innovations identified by this study fulfil a similar purpose, a notable example being Kolorob,[60] developed in-house by Save the Children and based on the principle of IRC's Refugee Buddy.[61] Kolorob is specific to Bangladesh, serving to connect rural–urban migrants to essential services on arrival in Dhaka, and allowing users to rate services. Another example is Integreat, a multiple language application which helps arriving migrants settle in Germany.[62]

These destination information applications fulfil a critical need in the migrant's future plans by elevating them above those who would provide them with misinformation in order to exploit them. Many of these innovations are European and have been developed in the wake of the Syrian refugee crisis. Many contain warm and generous messages from the host communities into which they have arrived. They can detail local language basics, job opportunities, how to access health care, and how to get emergency assistance. Refugees Welcome[63] is an application which matchmakes citizens willing to share their homes with displaced people. The company operates in Germany and has also started receiving offers to set up similar schemes across the European Union.[64]

A.5 INNOVATIONS FOR CHILDREN

Conspicuous by their relative absence are innovations focused specifically on migrant children. Young Refugees.nrw is the only application identified by this study.[65] This is a destination information application containing child-focused information for children settling in Norway. Although it could be argued that children face many of the same challenges as adults when migrating, given their additional vulnerabilities this absence of innovations is surprising, especially when considered in the context of the aforementioned 50 million children have migrated across borders or been forcibly displaced worldwide.

A.6 INNOVATIONS FOR FAMILY TRACING

Many tech companies have expressed an interest in fighting crime using technology. Innovative solutions have emerged, such as TraffickCam,[66] which uses a database to identify hotel rooms used by human traffickers, and Microsoft's Photo-DNA[67] which uses computer code to identify missing or exploited children. In China, where child abduction is particularly prolific, the applications Tuanyuan (Reunion)[68] and Baobeihuijia (Baby back home)[69] have received great acclaim and results, using face recognition and social media respectively to reunite missing children with their loved ones.

Refunite[70] is now a major online platform reuniting families separated through migration, and both Trace the Face[71] and Rapid FTR[72] list thousands of lost people and those looking for them with the aim of matching up lost and found people. There are clearly benefits to using social media and ICT to trace missing children, although this area also presents risks by potentially giving access to vulnerable people to those wishing to do harm to children.

There are also countless physical devices available using GPS, Bluetooth and mobile telephony to track the movement of children, and various stakeholders mentioned an interest in developing the use of such tools for the prevention of trafficking. Aside from the inherent risks associated with tracking of individuals and location information getting into the wrong hands, a challenge is that mobile devices are frequently taken from individuals by their traffickers. However, this study has found that many of the devices now available at relatively low cost are smaller and more discreet than a mobile phone, and may therefore be less likely to be taken from the individual.[73] Such devices offer a simple and cost-effective way for family and service providers to track family members, though it should be noted that some rely on access to mobile phone coverage.

A.7 PLATFORMS FOR DEVELOPMENT

A variety of open source platforms already exists developing reporting tool applications, delivering mass communication, and allowing data collection which feeds back into programming. Though somewhat beyond the scope of this report it is important to note that platforms such as U-Report, Frontline SMS, Rapid SMS and Rapid PRO are available for use at no cost for development for projects seeking to use technology to keep children on the move safe. Comcare is another platform designed for cheap and easy development of technical solutions and is being effectively used by some service providers. This serves to say that there are ICT solutions being used in the protection of children which are not actually being used by children themselves, but by the service providers who support them.

Annex B: Mapping of existing innovations

The following table presents a mapping of different migration-related apps.
Hundreds of apps now exist and this mapping only captures some of the most significant.

Name, description and web link	App	Web	Platform	Other	Coverage	Sponsor	Downloads (Google Play)[1]
SOURCE							
Migration and life as a domestic worker Preparation guide for migrant domestic workers https://play.google.com/store/apps/details?id=com.pasaporte.informativo&hl=es	■				South America	ILO	100–500
Helpbridge Emergency planning tool for separated families https://www.microsoft.com/en-us/philanthropies/product-donations/default.aspx	■				Worldwide		
Issara (not yet launched) Review site for migrants planning to work in Thailand http://www.projectissara.org/blank-jgwse	■				Myanmar-Thai		
My Life as a Refugee Educational app to learn about refugee journeys http://mylifeasarefugee.org/	■				Global	UNHCR	10,000–50,000

continued on next page

[1] As of December 2016

Name, description and web link	App	Web	Platform	Other	Coverage	Sponsor	Downloads (Google Play)[1]
SOURCE *continued*							
Telling the Real Story Information through story sharing of refugee experience http://tellingtherealstory.org/					Africa-Europe	UNHCR	
Surprising Europe Information through story sharing of reality at destination http://www.surprisingeurope.com/							
EN ROUTE							
Kricket Refugee tracking and information mapping app https://www.kricket.co/					Global		100–500
Icoon for refugees Pictorial communication tool for refugees http://www.icoon.eu/					Global		1,000–5,000
Northern Light Refugee tracking and information mapping app https://play.google.com/store/apps/details?id=me.thomas.northernlight&hl=en					Global		5–10
Refugee Phrasebook interactive Multilingual offline phrasebook for refugees https://play.google.com/store/apps/details?id=org.phrase.book&hl=en					Global		1,000–5,000
RefuGPS Offline refugee mapping and grid reference system https://play.google.com/store/apps/details?id=com.shero.refugps&hl=en					Global		10–50

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Name, description and web link	App	Web	Platform	Other	Coverage	Sponsor	Downloads (Google Play)[1]
EN ROUTE *continued*							
Refuchat Mobile refugee emergency voice/text translation app https://play.google.com/store/apps/details?id=com.wurzelkraut.refuchat&hl=en	■				Global		1,000–5,000
Refugee Maps Mapping software linked to refugee assistance charities http://refugeemaps.org/		■			Europe/ Balkans		
Info Aid Multilingual en route assistance tool for refugees https://play.google.com/store/apps/details?id=com.migrationaid.infoaid&hl=en	■				Balkans		5,000–10,000
First Contact Travel and destination information for refugees http://www.first-contact.org/		■			Europe		
Ushahidi Crowdsourced information and mapping platform https://www.ushahidi.com/			■		Worldwide		
Companion Voluntary companion app for monitoring friend's journey http://www.companionapp.io/	■				Worldwide		100,000–500,000
Refugee Aid Connects refugees to aid on their route https://play.google.com/store/apps/details?id=com.digitalfanclubs.refaid	■				Europe		500–1,000

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Name, description and web link	App	Web	Platform	Other	Coverage	Sponsor	Downloads (Google Play)[1]
EN ROUTE *continued*							
Refugee.Zone Maps refugee routes and allows markers to be placed https://play.google.com/store/apps/details?id=io.appery.project375139	■				Europe		100–500
Sole Connect Recording places of use along migrants route https://play.google.com/store/apps/details?id=com.app_movement.geolocation.sole_connect	■				Worldwide		10–50
DESTINATION							
Integreat Destination information app https://play.google.com/store/apps/details?id=tuerantuer.app.integreat&hl=en	■				Germany		1,000–5,000
Refugee Buddy Destination information app https://play.google.com/store/apps/details?id=com.afrogleap.refugeebuddy&hl=en	■				NL and Canada	ICRC	1,000–5,000
RefugeeMaps Destination information app https://play.google.com/store/apps/details?id=de.appwerft.refugeemaps&hl=en	■				Hamburg		10–50
Love Europe Destination information app https://play.google.com/store/apps/details?id=nl.recreate.loveeurope&hl=en	■				Europe		1,000–5,000

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Name, description and web link	App	Web	Platform	Other	Coverage	Sponsor	Downloads (Google Play)[1]
DESTINATION *continued*							
Refugees Welcome Flatshare for refugees at destination http://net.fluechtlinge-willkommen.de/		■			Europe		
Refugee Info Information about destination countries http://www.refugee.info/fyrm/		■			Europe		
Kolorob Destination information app https://play.google.com/store/apps/details?id=demo.kolorob.kolorobdemoversion&hl=en	■				Dhaka		1,000–5,000
RefInfo Destination information app https://play.google.com/store/apps/details?id=com.goodbarber.inforef	■				Holland		500–1,000
Young refugees.nrw Destination information app for children https://play.google.com/store/apps/details?id=de.aconsite.android.youngrefugees	■				Norway		500–1,000
Welcome to Europe Information about destination countries http://w2eu.info/asylum.en.html		■			Europe		
Refucomm Information about destination countries http://refucomm.com/		■			Greece		

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Name, description and web link	App	Web	Platform	Other	Coverage	Sponsor	Downloads (Google Play)[1]
DESTINATION *continued*							
Ankommen Destination information app https://play.google.com/store/apps/details?id=de.br.ankommen					Germany		100,000–500,000
Helping Hand Destination information app https://play.google.com/store/apps/details?id=helpinghandapp.com.br&hl=en					Brazil		500–1,000
The Refugee Center Information about destination country http://therefugeecenter.org/					USA		
Welcome App Germany Destination information app https://play.google.com/store/apps/details?id=de.welcome_app_concept.welcome2germany&hl=en					Germany		10,000–50,000
FAMILY TRACING							
Refunite Reunification service for separated people https://refunite.org/					Global		
Trace the Face Reunification service for separated people https://familylinks.icrc.org/europe/en/Pages/home.aspx					Global	ICRC	
Rapid FTR Open source family tracing app and storage system http://www.rapidftr.com/					Global	UNICEF	

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Name, description and web link	App	Web	Platform	Other	Coverage	Sponsor	Downloads (Google Play)[1]
MISSING CHILDREN							
Tuanyuan (Reunion) Social media alerting app for missing children					China	Govt	
Baobeihuijia (Baby back home) Using face recognition to reunite missing children http://www.baobeihuijia.com/					China		
Thai Missing Social media alerting app for missing children https://play.google.com/store/apps/details?id=com.trueit.thaimissing					Thailand	Mirror Foundation	5,000–10,000
PLATFORMS FOR DEVELOPMENT							
U-Report Platform for harnessing views of children worldwide https://ureport.in/					Worldwide	UNICEF	1 million
Frontline SMS Scalable mobile messaging platform http://www.frontlinesms.com/					Global		
Rapid SMS Scalable mobile messaging platform http://www.rapidsms.net/					Global		
Rapid PRO Open source mobile interaction platform https://community.rapidpro.io/					Global	UNICEF	

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Name, description and web link	App	Web	Platform	Other	Coverage	Sponsor	Downloads (Google Play)[1]
HUMAN TRAFFICKING							
Traffickcam Anti-sex trafficking tool and database https://traffickcam.com/	■	■			Global		
The STOP App Human trafficking reporting app https://play.google.com/store/apps/details?id=com.fivestones.fivestones&hl=en	■				Worldwide		100–500
Just Enough Human trafficking reporting app https://play.google.com/store/apps/details?id=com.JustEnoughUK&hl=en	■				UK		
Traffick Stop Human trafficking awareness website http://www.traffickstop.org/		■			Worldwide		
INFORMATION SHARING							
Internet of Good Things Free access mobile information site http://www.internetofgoodthings.org/		■			Global	UNICEF	
Popstats UNHCR people of concern stats app https://apkpure.com/popstats/com.popstats	■				Global	UNHCR	10–50

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Name, description and web link	App	Web	Platform	Other	Coverage	Sponsor	Downloads (Google Play)[1]
INFORMATION SHARING *continued*							
Serve Refugees Catalogue app allowing people to access refugee projects https://play.google.com/store/apps/details?id=com.serverefugees.serverefugees&hl=en	■				Global		1,000–5,000
Uhuru Mapping refugee business around the world https://play.google.com/store/apps/details?id=com.uhuru.android.app&hl=en	■				Global		100–500

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[16] This dataset is based on responses from 68 children through focus group discussions

[17] This dataset is based on responses from 78 children through questionnaire

[18] This dataset is based on responses from 78 children through questionnaire

[19] This dataset is based on responses from 134 children through focus group discussions and questionnaire

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PROTECTING CHILDREN ON THE MOVE IN ASIA

through Information and Communication Technology (ICT) and Social Media

This study examines the level of access children who migrate in Asia have to information and communication technology (ICT) and social media platforms, and looks at how these children are using communication devices and social media. The study aims to utilise these findings to establish whether social media and technology can play a greater part in keeping children safe while on the move.

Focusing on children on the move in Bangladesh and Myanmar as source countries, as well as Malaysia and Thailand largely as destination countries, the study involved a total of 134 children through focus group discussions and surveys. Selection ensured that participants were within the correct age range and had migrated or were likely to migrate due to their family circumstances and location. In addition 38 research participants from NGOs, service providers, technology companies and academic institutions took part in the study.

This report is aimed at individuals and organisations working with children on the move and with an interest in how to reach those who would benefit from its potential for protection.

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