Zooming in on Media and Information Literacy

A survey-based typology of young media users

DW Akademie

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Executive summary

While global youth is often referred to as a fairly homogeneous generation of digital natives, data drawn from a survey in Jordan, Moldova, and Uganda suggests that this is not the case. Based on an instrument for measuring digital and news literacy, this paper presents a typology of five personae: The MIL Novice, the MIL Intermediate, the MIL Veteran, the Digital Literacy Veteran and the News Literacy Veteran. The descriptions of these five types of media users can be employed as prototypes when developing Media and Information Literacy (MIL) programs and materials for 15 to 35-year-olds.

Introduction

Over the past 20 years there has been a tendency to describe the generation today aged between 15 and 35 years as a monolithic block. Titles have included the "net generation", "generation @", "generation digital", "generation internet" and "digital natives", the latter being the most popular epithet (see Schmidt, Paus-Hasebrink, Hasebrink 2009). Lumped together and set apart from its predecessors, the young generation is seen as immersing itself in all things digital, turning its back on traditional media the world over, regardless of where individuals come from or what their social and educational background is.

This paper sets out to show that this is not the case—at least not when you leave the narrow confines of the "Western world" behind. It is based on the assumption that "young people's use and skills are not uniform. There is no [...] widespread and universal disaffection, or [...] distinctly different learning style the like of which has never been seen before" (Bennett, Maton, Kervin 2008, 781). In consequence "there is no 'one-size-fits-all' program" (Hobbs 2010, 20) for young people from around the world in advancing their Media and Information Literacy (MIL). Instead, this paper develops a typology of five different MIL personae, based on a study conducted in Jordan, Moldova, and Uganda in 2017 and 2018. These personae can be applied as prototypical "clients" in gauging the needs of potential MIL project participants in the 15 to 35-year age bracket.

It is understandable that there is an affinity amongst academics (Buckingham 2003; Potter 2016; Hobbs 2017), organizations in media development (UNESCO 2013; IREX 2015; DW Akademie 2015), and practitioners towards unitary models of MIL because they reduce complexity and make it easier to find solutions. Additionally, the fo-

Media and Information Literacy has come to the fore as one of the most important fields in current media related development work. Organizations engaged in this field range from the likes of Google and Facebook to local youth NGO's. The focus, at least when it comes to the activities of media development organizations such as Free Press Unlimited, IREX or DW Akademie, is on empowering citizens to put their rights to access information and freedom of expression into practice. Based on the tool developed in this paper, it is hoped that more nuanced strategies for MIL interventions in the development context can be developed.

cus on such phenomena as disinformation, hate speech, and filter bubbles seems to suggest that we are faced with a fixed set of problems that calls for unitary solutions. What is lost here is the perspective of the media (prod)users. Depending on their position in the world and in their society, they can be confronted with very different versions of disinformation, hate speech, and selective exposure. Their needs can be very different. Citizens require multiple literacies in order to be able to react flexibly to different situations and contexts (Kellner 1998). Strengths and weaknesses, benefits and vulnerabilities are unequally distributed. Thus, as Bulger and Davison (2018, 13) point out, one of the most pertinent open questions in media education today is what criteria beyond age one might use to describe the diverse needs of different segments of the population. This paper proposes to use MIL skills (digital literacy and news literacy) to discern different needs in a given population.

Tailoring MIL projects to the specific needs of beneficiaries is key. Failing to do so leads to frustration on the part of MIL learners and ultimately to a fundamental misallocation of resources. From a human rights perspective, "MIL programmes must be uniquely designed to target youth in rural and remote communities whether online or offline" (Grizzle and Tornero 2016, 198). This calls for a fine-grained instrument, enabling needs assessment at the individual level. The present paper should be seen as a contribution to that end.

The Media and Information Literacy Assessment (MILA) study

In 2017 and 2018, DW Akademie conducted a Media and Information Literacy Assessment (MILA) Study in three different countries: Jordan, Moldova, and Uganda. The aim of the study was to identify MIL needs of 15 to 35-year olds and to gain insights into the level of Media and Information Literacy in those countries. Each of these countries presents specific challenges in terms of MIL: Jordan is characterized by a media landscape under strong political influence and subject to strict licensing practices. In Moldova, television is the predominant medium, with stations run either by the state or by oligarchs with their own agendas. Uganda has seen several laws restricting freedom of expression and there is a growing hostility towards the media and journalists. These deficits across the three countries make focusing on empowerment of citizens all the more pertinent, in order for them to be able to put their freedoms (access to information, expression) into practice and for them to come to terms with the problems arising from such challenging media environments.

For the typology to be presented here, data from three representative surveys with 15 to 35-year olds in Jordan, Moldova and Uganda was fused into a single data set of n = 2,491 respondents. The items on each of the questionnaires were identical and were based on the MIL model of DW Akademie (2018). To develop the typology, first factor analyses, cluster analyses, and reliability tests were performed to identify underlying traits of the MIL items. This yielded two scales: one for news literacy and one for digital literacy. In a next step, a

cluster analysis was performed to identify distinct types of Media and Information Literacy, which gave us five categories of citizens based on the two scales.

For more details on the individual steps that led to the typology, please view the methodological annex. It is important, at this stage, to emphasize that the five categories were not developed a priori or ad hoc: They were drawn from the data and thus the traits described are always backed up by the answers given by the respondents in the three surveys conducted.

Five MIL personae identified

The "persona" method utilized in this paper was developed within marketing practices as a method of consumer segmentation. "Personas make it easy to imagine the real people who will eventually use the product you are designing and building" (Pruitt, Adlin 2006). These personal profiles help picture clients during the process of product development, focusing on their wants and needs. Personae are based on research data. In this case, they are based on the typology drawn from the cross-national set of data via cluster analysis and serve to inform practitioners on the ground as to the strengths and deficiencies of different types of media (prod)users in terms of MIL.

The respondents that took part in the survey fall into one of five categories of media and information literates, each of which have specific strengths and/or weaknesses when it comes to digital literacy and news literacy. None of the described persons actually exist; they are artificial portraits based on the data collected during the survey and supplemented by fictitious personal details that make the persona narratives more poignant and easier to imagine. The pictures, too, do not depict living individuals. The illustrations serve the purpose of painting a more vivid portrait of different types of potential MIL beneficiaries.
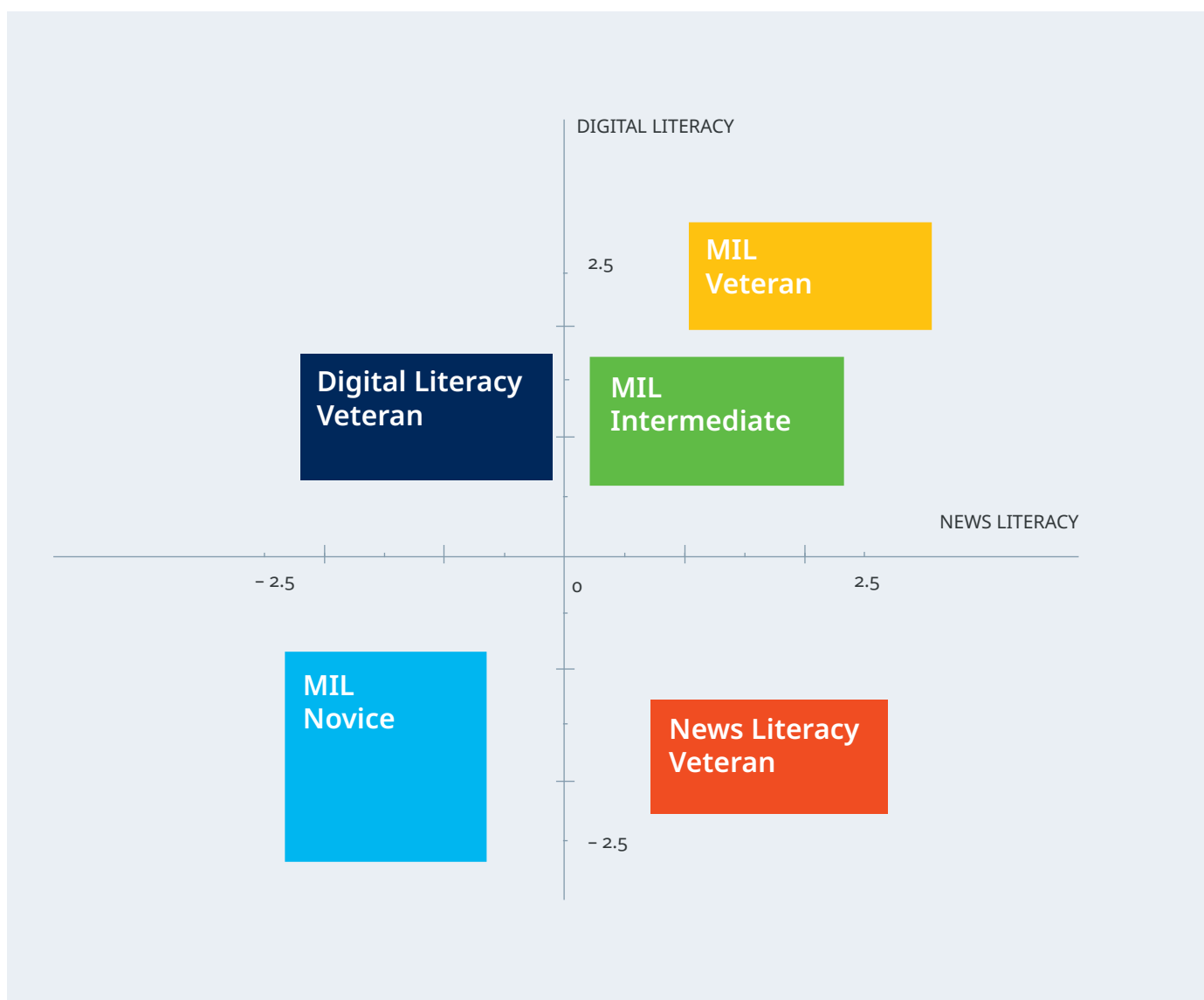
MIL Novice: –1,28 news literacy, –1,72 digital literacy | MIL Intermediate: 1,33 news literacy, 1,09 digital literacy
MIL Veteran: 1,50 news literacy, 2,09 digital literacy | News Literacy Veteran: 0,93 news literacy, –2,22 digital literacy
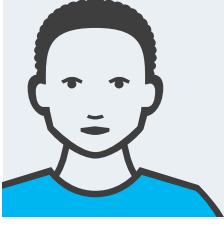Digital Literacy Veteran: –0,99 news literacy, 1,07 digital literacy

MIL PERSONAE		DIGITAL LITERACY	NEWS LITERACY	JORDAN	MOLDOVA	UGANDA	TOTAL
MIL Novice		👎	👎	16.4	26.8	57.2	34.1
Digital Literacy Veteran		👍	👎	10.6	20.6	10.6	13.8
News Literacy Veteran		👎	👍	10.9	8.1	20.6	13.4
MIL Intermediate		🤚	🤚	34.2	21.6	8.0	20.9
MIL Veteran		👍	👍	27.9	22.9	3.7	17.8

Table 1: Types of media and information literates (personae).
Numbers in the table indicate percentage of respondents in the corresponding countries.

1. Media and Information Literacy Novice
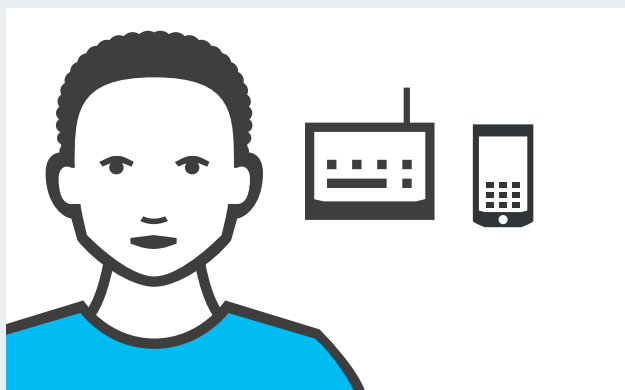
Akello Mukasa lives in a small village in western Uganda. Having left school after the primary level, the 18-year-old works as a street vendor selling Chapati to commuters heading to the major cities of Kampala and Entebbe.

Media ownership: radio set, feature phone.

Media use: listens to the radio daily, whether at home or at work; it is his prime source of news; regularly watches TV at his friend's house for entertainment; asks a friend when he needs to contact someone via Facebook or WhatsApp.

Media attitudes: he values media diversity, sometimes finds it difficult to understand the news, and feels most news he listens to is objective and trustworthy, and that it satisfies his information needs.

Digital Literacy: low: uncritical of Internet shutdowns, online disinformation, and hate speech; unaware of cookies, privacy settings, and the possibility of fake social media profiles.

News literacy: low: aware of the threat of media concentration; uncritical of media censorship and media hate speech; unaware of the watchdog function of news media, the constitutional right to freedom of expression and of journalistic standards (accuracy, independence, inverted pyramid).

Box 1: Persona "Media and Information Literacy Novice"

MIL Novices like Akello (see box 1) have low digital literacy as well as low news literacy skills. The proportion of MIL Novices varies starkly from country to country. While over half of the Ugandan respondents turned out to be of this type, around one quarter of Moldovan and one sixth of Jordanian respondents were Media and Information Literacy Novices. They predominantly live in rural settings and are less educated than the average respondent, using traditional rather than digital media less out of choice than out of necessity.

There are some notable deviations from country to country. Television consumption is considerably higher amongst Jordanian and Moldovan novices, while radio consumption is higher in Uganda. Geographically, Jordanian novices are predominantly urban, as opposed to the two other countries. The level of education is higher amongst Moldovans and Jordanians, as compared to Ugandan novices. These observations concerning media use, rural-urban split and education are not specific to the MIL Novices but are consistent findings across all MIL types. Jordanian novices, however, also have more digital know-how and awareness of values (freedom of expression, media independence), while the Moldovans are more critical of their national media and do not value media diversity very highly. There are slightly more male novices in Moldova, while the gender balance is almost equal in Uganda and Jordan.

Suggestion for capacity building: From a practical perspective, these segments of the population are in need of basic Media and Information Literacy, focusing on the fundamentals in mass media consumption, fostering a critical attitude towards problematic forms of communication and creating opportunities for them to voice their concerns. At the same time, MIL can lay the foundations for a higher level of competency in digital communication, showing people like Akello how they can benefit from the Internet, also in terms of job opportunities and upskilling, while avoiding the pitfalls the virtual space holds for beginners. A specific challenge is developing suitable learning material and designing workshops that take into account most MIL Novices' low levels of education. The existing material is often designed for school students which could be too demanding.

Northern Uganda
- 61,9
- 10,1
- 17,5
- 9
- 1,6

Western Uganda
- 62,2
- 14,4
- 14,4
- 5,9
- 3,2

Central Uganda
- 44,8
- 9,1
- 29,9
- 14,1
- 2,1

Eastern Uganda
- 61,6
- 8,7
- 19,2
- 2,7
- 7,8

Kampala

UGANDA
- 57,2
- 10,6
- 20,6
- 8
- 3,7

■ MIL Novice   ■ Digital Literacy Veteran   ■ News Traditionalist   ■ MIL Intermediate   ■ MIL Veteran
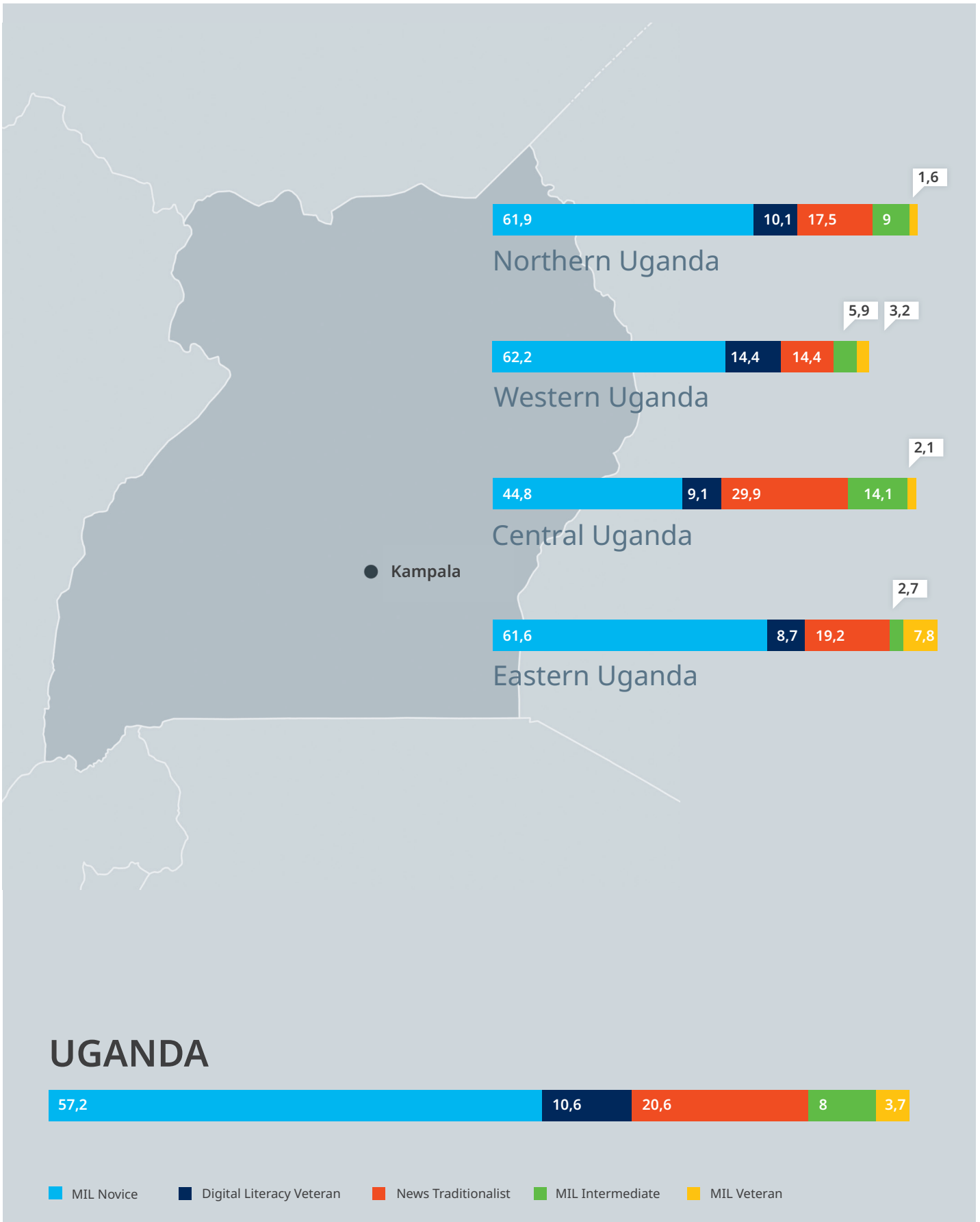
Image 2: Distribution of MIL types across different regions of Uganda

2. Digital Literacy Veteran

Maria Ursu is 16 years old. She goes to a private secondary school in a small town on the Moldovan border to Romania. Maria lives with her parents in a small house on the banks of the river Prut.

Media ownership: radio set (family), television set (family), smartphone, laptop.

Media use: favorite source for news is the Internet, which she accesses on her smartphone and laptop on a daily basis; watches TV daily; listens to the radio when her parents do so in the kitchen; leafs through youth magazines at the local store from time to time.

Media attitudes: she values media diversity and sees deficits at national media in terms of objectivity and trustworthiness, in fact she feels that social media cover her information needs better than the national media; she sometimes finds it difficult to understand the news.

Digital Literacy: high: critical of Internet shutdowns and online disinformation; aware of cookies, privacy settings and somewhat conscious of the pitfalls of social media anonymity; she accepts online hate speech as given.

News literacy: low: somewhat aware of the threat of media concentration; unaware of the watchdog function of news media, the constitutional right to freedom of expression and of journalistic standards (accuracy, independence, inverted pyramid), except for protection of anonymous sources; uncritical of media censorship and media hate speech.

Box 2: Persona "Digital Literacy Veteran"

Digital Literacy Veterans have high digital literacy skills accompanied by low news literacy competencies. Roughly one fifth of respondents from Moldova were of the Digital Literacy Veteran type, compared to about every tenth Jordanian and Ugandan respondent. Contrary to what one might think, Digital Literacy Veterans are not predominantly male. The gender balance is about 50:50. Also, Digital Literacy Veterans do not use social media or the Internet in general as often as the MIL Veterans or even the MIL Intermediates do (see below). Social media are used more for personal interaction than for news and information. Interestingly, digital media also do not supplant traditional media in this MIL segment. Rather, Digital Literacy Veterans use traditional media as often as the average citizen, though the extent to which they are able to appropriately reflect on their news consumption is much less developed than for the digital realm.

While Ugandan and Jordanian Digital Literacy Veterans are fond of social media as sources of news, their Moldovan counterparts seldom use them as a source for getting information. Almost all Jordanian Digital Literacy Veterans use Facebook on a daily basis, compared to around half of Moldovan and Ugandan representatives. The Jordanians are also characterized by a less critical view of Internet shutdowns and media concentration. The majority of Ugandan and Jordanian Digital Literacy Veterans do not know what browser cookies are, whereas the Moldovan respondents were less aware of the pitfalls of fake Facebook profiles.

Suggestion for capacity building: In terms of MIL training, Digital Literacy Veterans require classic news literacy courses. It is not true that they do not utilize traditional media, but they should be encouraged to reflect on it as well: How is journalism created? What is good journalism? What are the effects of news bias, propaganda, and hate speech on society? Seeing as they are well versed in digital literacy, one might search for commonalities between digital and traditional media skills and choose them as a starting point, for instance, comparing and analyzing the perspectives of online videos and television newscasts on the same events. A special focus might also be put on social engagement, letting them create media content and disseminate it to initiate change.

North Moldova

| 17,4 | 15,6 | 8,5 | 22,8 | 35,7 |

Central Moldova

| 42,1 | 24,7 | 8,5 | 16,6 | 8,1 |

4,6

Chisinau

| 18,9 | 14,3 | | 25,5 | 36,7 |

South Moldova

| 26,3 | 30,7 | 10,5 | 22,8 | 9,6 |

Gagauzia

| 25,7 | 25,7 | 14,3 | 22,9 | 11,4 |

MOLDAVA

| 26,8 | 20,6 | 8,1 | 21,6 | 22,9 |

■ MIL Novice ■ Digital Literacy Veteran ■ News Traditionalist ■ MIL Intermediate ■ MIL Veteran
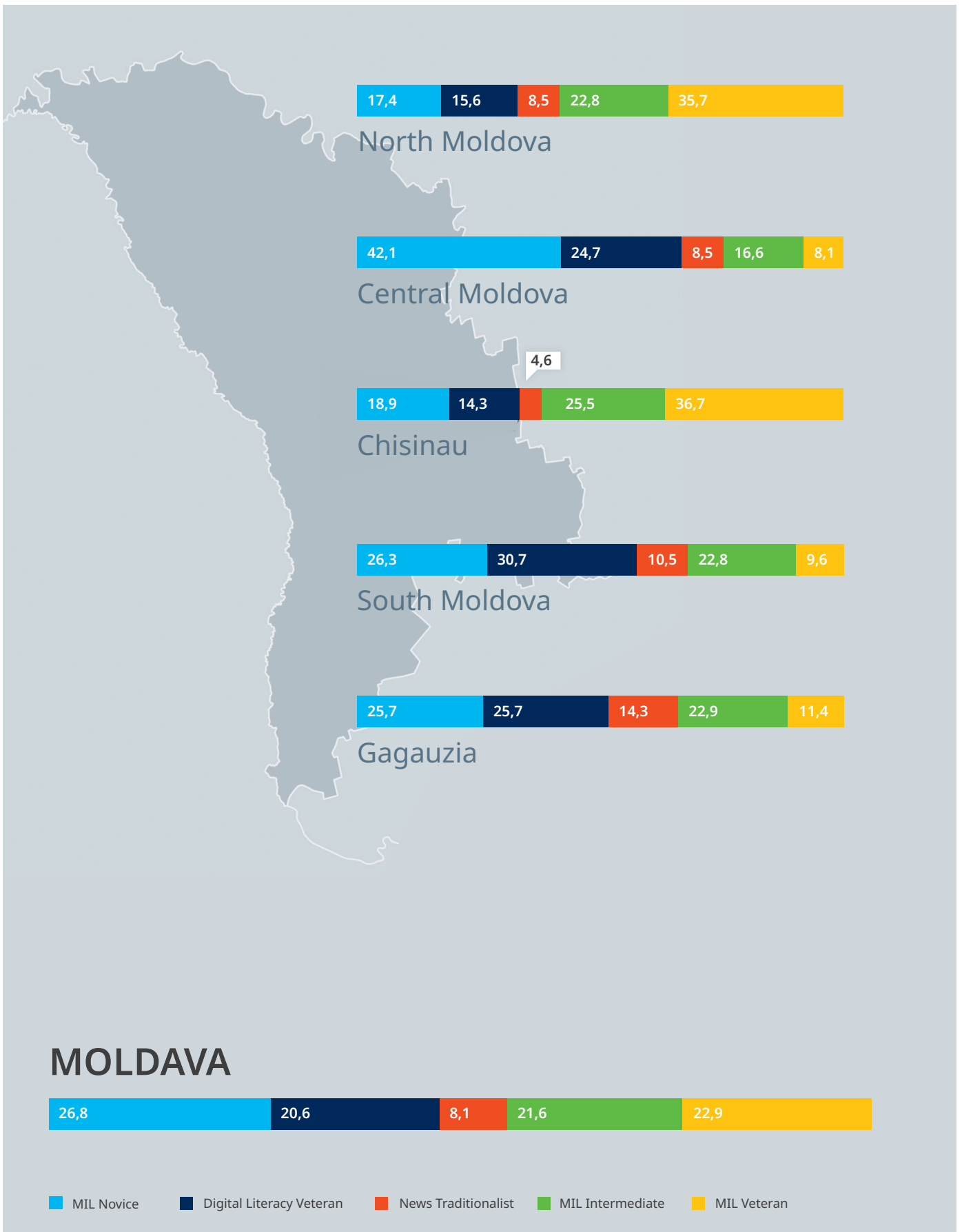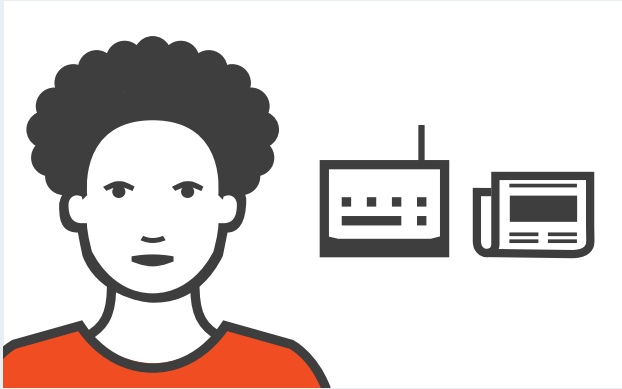
Image 4: Distibution of MIL types across different regions of Jordan

3. News Literacy Veteran

Margaret Tianah is a subsistence farmer in western Uganda. The 35-year-old mother of four spends most days tending to her fields and caring for her offspring.

Media ownership: radio set, TV set, basic mobile phone without Internet access capabilities.

Media use: daily radio consumption for news; regular TV consumption for entertainment; no use of the Internet; she reads the newspaper on occasion.

Media attitudes: she appreciates having a variety of different information sources and is quite critical of national media in terms of objectivity; however, she feels that traditional media cater for her information needs on the whole; Maggie often finds it difficult to understand the news.

Digital Literacy: low: not critical of Internet shutdowns, online disinformation or online hate speech; no knowledge of cookies, privacy settings and no awareness of the risk associated with fake social media accounts.

News literacy: high: somewhat aware of the negative impact of censorship, highly aware of the value of media diversity, of the watchdog function of news media, media independence and of the right to freedom of expression; limited understanding of the benefits of journalistic accuracy in relation to timeliness and of the danger of hate speech in traditional media.

Box 3: Persona "News Literacy Veteran"

News Literacy Veterans like Margaret have high news literacy skills but low digital literacy skills. They account for a bit more than one-fifth of the Ugandan respondents, while about one-tenth of Jordanian and one-twelfth of Moldovans belong to this group. The proportion of rural News Literacy Veterans is higher (56.8%), but not much higher than the urban proportion (43.2%). The gender split is almost 50:50. They tend to be older than the other MIL types and are less educated. Nevertheless, every fifth member of this group says newspapers and magazines are an important source of information to them. News Literacy Veterans are the type of respondent with the least exposure to digital media.

While the majority of these types of citizens from Jordan and Uganda do not view social media as a relevant source of information, the opposite is true for Moldovan News Literacy Veterans. The Moldovan segment of this cluster also uses the Internet far more often than the others. This means that the eight percent of Moldovan respondents in this cluster use digital media frequently but lack the literacy to use them responsibly, whereas the respondents from Uganda and Jordan do not use them frequently and probably lack appropriate skills because of this. The Moldovans were also much more critical of hate speech in the media than their counterparts from the other countries. The Jordanian News Literacy Veterans were the only ones with a majority endorsing government censorship, only a narrow majority valuing media diversity and very little awareness for the value of news accuracy (in relation to timeliness), but they were also most critical when it came to media corruption. The Ugandans were most aware of the inverted pyramid style of reporting, i.e., stating the most important information at the beginning of a report.

Suggestion for capacity building: When addressing the needs of News Literacy Veterans, MIL courses can build on a solid foundation. They know their way around the media landscape in general, traditional media in particular and their function in society. It is the digital literacy skills that need to be developed, from the technical side, across questions of navigation and privacy, to the more fundamental negative phenomena of disinformation, hate speech, and filter bubbles, breaking them down to issues that are relevant in the local context. If they are skeptical of new technologies, MIL should involve showing them the digital dividend they can achieve at the personal level while taking their reservations seriously.

Northern Jordan

MIL Novice	Digital Literacy Veteran	News Traditionalist	MIL Intermediate	MIL Veteran
15,2	14,4	14,4	37,1	26,6

Amman

MIL Novice	Digital Literacy Veteran	News Traditionalist	MIL Intermediate	MIL Veteran
15,1	10,7	9,7	33,3	31,1

Central Jordan

MIL Novice	Digital Literacy Veteran	News Traditionalist	MIL Intermediate	MIL Veteran
15,8	6,2	13,6	37,9	26,6

Southern Jordan

MIL Novice	Digital Literacy Veteran	News Traditionalist	MIL Intermediate	MIL Veteran
27,8	11,1	20,8	19,4	20,8

JORDAN

MIL Novice	Digital Literacy Veteran	News Traditionalist	MIL Intermediate	MIL Veteran
16,4	10,6	10,9	34,2	27,9

Legend: ■ MIL Novice ■ Digital Literacy Veteran ■ News Traditionalist ■ MIL Intermediate ■ MIL Veteran
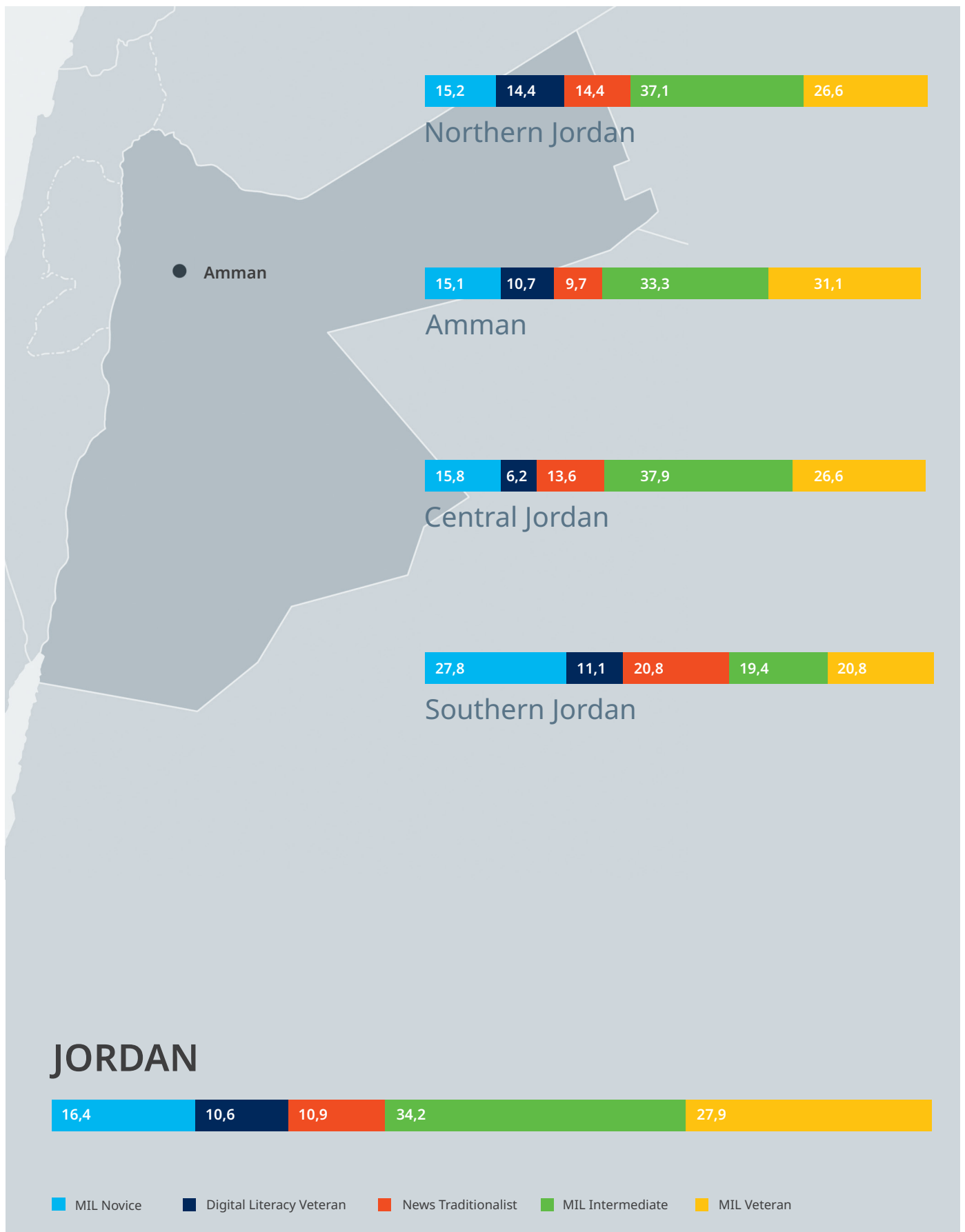
Image 4: Distibution of MIL types across different regions of Jordan

4. MIL Intermediate

Omar Ahmad is a restaurant owner, resident in Jordan's capital Amman. The 33-year old is always online, keeping in contact with suppliers, his staff, and important customers.

Media ownership: car radio, multiple television sets, smartphones, laptops.

Media use: he is online as often as possible, at home and at work; Omar regularly reads the weekend edition of a local newspaper; radio is listened to in the car to and from work; TV is always on in the background when he comes home.

Media attitudes: it is important to him to be able to compare different news sources; he has no difficulties understanding the news and is critical of the objectivity of news from Jordanian media; he views social media as catering better for his information needs than the national media, though he feels you can trust most news most of the time.

Digital Literacy: medium: Omar is unaware of browser cookies but knows how to adjust his Facebook privacy settings; he's somewhat aware of the risks associated with fake social media accounts but has difficulties identifying disinformation and hate speech; he has an indifferent attitude toward Internet shutdowns.

News literacy: medium: he rejects government censorship, but does not see much harm in media concentration; he is aware of the news media's function as fourth estate and of the constitutional right to freedom of expression, but does not know his way around certain journalistic standards (accuracy, inverted pyramid); he does, however, appreciate media independence.

Box 4: Persona "Media and Information Literacy Intermediate"

As the name indicates, MIL Intermediates like Omar have an intermediate level both of digital literacy and news literacy. More than one-third of Jordanian respondents are of this type, quite knowledgeable but with potential for improvement. The same applies to about every fifth respondent from Moldova and every twelfth respondent from Uganda. Overall, more than two-thirds of all MIL Intermediates are city dwellers and one-third is between 30 and 35 years old. They are also more educated than average. There is an even balance between male and female respondents and a strong affinity to all things digital, but traditional media (especially television) are still used frequently. In comparison to MIL Veterans, however, the frequency of usage is generally lower.

Focusing on differences between the three countries, Moldovan intermediates are far less inclined to use social media as a news source than their counterparts from Uganda and Jordan. Jordanian intermediates are on Facebook far more frequently than the others, while Ugandan representatives of this cluster use messengers like WhatsApp less frequently than Moldovan or Jordanian representatives. In terms of literacy, Jordanians were less inclined to condemn Internet shutdowns and media concentration, had more problems identifying disinformation and did not see the value of news accuracy in the light of the ever faster turning news cycle, but

were better able to critically reflect the authenticity of social media accounts. Moldovans were least able to identify where to adjust their social media privacy settings, and Ugandans were least aware of the watchdog function of news media but more of them knew the inverted pyramid rule for writing news reports. Both Jordanian and Ugandan intermediates were less critical of hate speech in the media.

Suggestion for capacity building: MIL Intermediates do not need the MIL basics. They know their way around both traditional and digital media, but they can improve. What MIL Intermediates need is advanced MIL focusing on reflection of issues such as disinformation and hate speech in the local context and development of coping and/or combatting strategies. Especially amongst the older participants, the question arises of whether and how more creative and participative skills can be addressed, developing this group's ability to voice their concerns, putting their skills into practice, especially online.

5. MIL Veteran
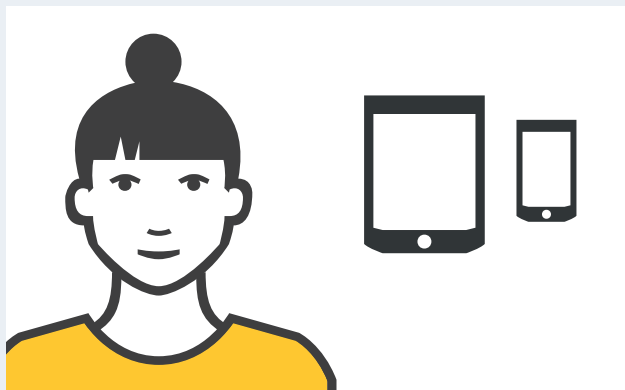
Twenty four year old Natalia lives in Moldova's capital of Chisinau. She works as a lawyer for an international retail firm and is always online.

Media ownership: car radio, multiple television sets, smartphones, tablet, business laptop.

Media use: Natalia constantly checks her smartphone for the latest developments; even at work, her flatscreen television is always on, giving her the latest in business news from around the world; she only ever listens to the radio in her car to catch some local news and buys fashion magazines every once in a while.

Media attitudes: she has a taste for media diversity and thoroughly comprehends the daily news; the level of objectivity of news distributed by Moldovan media is regarded as quite low by her and she feels she does not get the whole picture from them; social media are taken as a welcome source for additional news and Natalia is inclined to believe that you cannot trust most news most of the time.

Digital Literacy: high: Natalia is critical of Internet shutdowns, online disinformation, and hate speech; she knows all about browser cookies and social media privacy settings; she is also aware of the danger of fake social media accounts.

News literacy: high: she rejects government censorship in news media, increases in media concentration, and mainstream media propagating intolerance towards minorities; her awareness of the news media's watchdog function, the right to freedom of expression, and journalistic standards (independence, accuracy) is generally high, with the exception of the inverted pyramid rule, stipulating journalists put the most important information at the beginning of a report, which she has not heard of.

Box 5: Persona "Media and Information Literacy Veteran"

MIL Veterans like Natalia are characterized by both high digital and high news literacy. They are familiar with the traditional world of television, radio, and print, as well as with the digital realm. They feel comfortable in both settings, are able to access and critically judge media and information sources, as well as create their own accounts of events. They have the highest online consumption, are very active on social networks and Internet-based messengers, but also watch television more often than any other group and are amongst the most frequent readers of the printed press. MIL Veterans tend to live in cities, have the highest level of education amongst all MIL groups, and there are slightly more women (56.7%) than men amongst them. They are quite evenly distributed in terms of age.

Of the three countries under investigation in this study, Jordan features the highest proportion of MIL Veterans (27.9%), closely followed by Moldova (22.9%). The percentage of this MIL segment is very low in Uganda, accounting for only 3.7 percent of respondents. The direct national comparison shows that the Ugandan respondents had difficulties when it comes to digital privacy on Internet browsers, the benefits of news accuracy as well as identifying hate speech and government censorship of newspapers, while the Jordanian group failed to see much harm in having only one media outlet in their country and the Moldovan segment was less critical of media corruption. Despite these deficits, the MIL Veterans are the cluster that stands for an above average level of MIL knowledge and skills.

Suggestion for capacity building: As far as MIL Veterans are concerned, new formats of peer to peer MIL training need to be developed. It makes sense to seek out these champions to have them share their insights and skills with others becoming multipliers, mentors and serving as a role model for the other types of citizens mentioned above. This would require focusing more on developing soft skills and training methods in order for them to be able to pass on what they know to others.

Conclusions

The results above show the wide variety of Media and Information Literacy prevalent in the three countries the MILA Study looks at. While Moldova shows a fairly even distribution across all five forms of MIL, more than half of Jordanian respondents are MIL Intermediates and Veterans, and more than half of Ugandan survey participants are of the MIL Novice type. The unequal distribution of the various types of Media and Information Literacy beneficiaries alerts us to the fact that there is no one-size-fits-all strategy to MIL. It is important to know which group you are targeting.

Trainers should be sensitive to the needs of beneficiaries and be flexible in determining the focus and intensity of MIL training. Groups need not be homogeneous, so within-course differentiation and drawing on the strengths of certain participants is key: However young participants may be, they are never blank slates. As the typology suggests, MIL Novices, News Literacy Veterans and MIL Intermediates are especially in need of specific digital literacy guidance, but MIL Novices, Digital Literacy Veterans and MIL Intermediates also need to advance their news literacy skills.

The personae seem well suited to bringing the main characteristics of the different MIL types to the fore. However, each focuses on only one individual from one of the three countries involved. This may pose a problem for practitioners more interested in one of the two other countries not focused on in the given persona description. Seeing as the portrayal is based on the cross-national data set, the description can however be applied to the other countries with few context-sensitive changes. The News Literacy Veterans, for example, are more television focused in the two non-African countries than in Uganda. Seeing as the typology arrived at is so close to common sense, it seems sensible to maintain the five types across countries, rather than developing a separate typology for each country. The cross-cultural applicability of the beneficiary types, drawn from three very different parts of the world, is one of the strengths of the method presented here.

Of course, the young generation has more digital experience than its predecessors, regardless of educational level, social status, or gender. All of them "come to […] programs as knowledgeable and asset-bearing rather than deficient or needy" (Eubanks 2011, 32). And yet the results presented here highlight the fact that skills are unevenly distributed within and across countries, emphasizing the need for a differentiated approach that offers different benefits for the diverse spectrum of potential beneficiaries.

The typology presented here is a further step in search of approaches and methods better suited to the complex environment in which the media landscape and citizens' communication skills intersect. During the course of this study it became apparent that the questionnaire was not sufficient in reflecting all five dimensions of DW Akademie's MIL model: Access, analysis, creation, action and reflection. But it is these five fields that MIL trainers should be able to cover, in a flexible user-oriented manner. In terms of research, the next step would thus be to systematize the measurement of MIL accordingly and to develop a more thorough measurement tool for assessing MIL skills in the Global South.
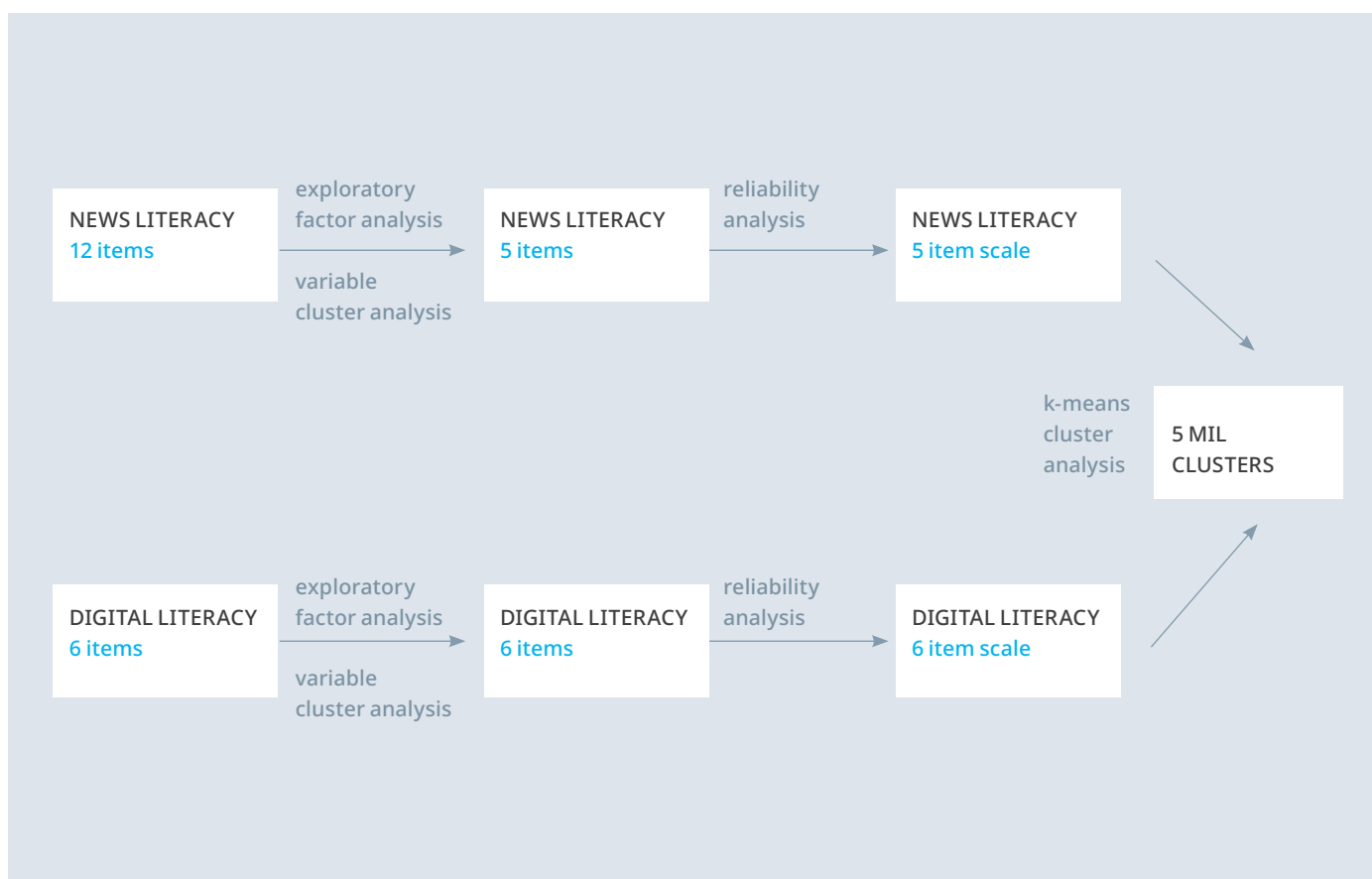
Image 5: Methods used to develop the MIL typology

Methodological appendix

The survey questionnaires in all three countries contained 18 multiple choice items for measuring MIL, six questions for digital literacy and twelve questions for news literacy. The methods used for the analysis of the data were standard statistical analysis tools. Factor analysis was used to reduce the 18 variables of the survey to a limited number of underlying "latent" variables, which then enabled developing the personae based on the reduced instrument. In the following, this process is briefly sketched in some more technical detail.

Based on the factor analysis, the battery of items was fixed at six for digital and five for news literacy. While the digital-literacy scale was found (by the "screeplot method") to have one underlying factor, three factors were found for the news literacy items. The news-literacy factor loading for most items was chosen to represent news literacy as a whole because that factor could readily be interpreted as encompassing the most important norms and skills in news literacy. The reduction was backed up by an analysis of dendrograms of cluster analyses of those variables.

Cronbach's alpha, a reliability score ranging from 0 to 1, yielded 0.7 for the digital literacy (satisfactory) and 0.8 (good) for the news-literacy scale. Both the factor and the reliability analyses were based on tetrachoric correlations, seeing as the multiple-choice items were binary with four options instead of standard metric variables. Finally, the two scales were converted into indices and a k-means cluster analysis was

calculated based on both scale indices, to be able to construct groups of respondents with similar traits. The optimal number of clusters was chosen based on a comparison of within-cluster sum of square metrics with the number of clusters ("elbow method"). Based on the above procedure, five clusters were derived from the data, i.e., five types of potential Media and Information Literacy beneficiaries.

Items of the digital-literacy scale

DL1: Should government switch off the Internet whenever ministers think it is time to do so?

Yes, because a lot of things on the Internet are bad for young people

Yes, because warfare nowadays is also on the Internet

No, because switching it on isn't as easy as switching it off

No, because people can't get informed or express their opinions freely anymore

DL2: How do you make sure that what you have done on Internet pages is deleted after you are finished?

By deleting your browser

By deleting cookies

By deleting your favorites

By deleting all Internet pages you used

DL3: Have a look at the following picture of Facebook network settings. The buttons for the settings are numbered. Which of these buttons would you use to make sure only your friends can see what you post on the social network?

Button 1

Button 2

Button 3

Button 4

The respondents were shown an image of the Facebook settings with four buttons numbered, one of which was the button for privacy settings.

DL4: Have a look at the following Facebook profile. Take a close look at the photo, circled in red. What would you say about the person who the Facebook profile belongs to?

The person the profile belongs to really looks like the person on the photo

The person doesn't look like the person on the profile photo at all

The person looks similar to the person on the profile photo, but not exactly like her

On social networks you can never tell whether the person really looks like the profile photo or not

The respondents were shown an image of a fictitious Facebook profile featuring a profile picture of someone from their home country.

DL5: Please look at the following message on Facebook. Would you believe that the company has a cure for HIV/Aids?

Yes, because they are from a company

Yes, they have an official social network account

No, because they do not offer proper proof

No, they haven't had enough positive reactions yet

The respondents were shown a fictitious Facebook post by a company declaring they had discovered a cure for HIV/AIDS.

DL6: Please listen to what someone commented on a social network site. What do you think of the comment?

It's okay because everyone can express their opinion

It's okay because what someone comments on social networks isn't important

It's not okay because he is threatening violence against them

It's not okay because his argument is not clear

The respondents are shown the following statement: All you spread is lies, lies, lies. I'm sick of it. You deserve to be beaten!!!

Items of the **news literacy scale**

NL1:   If a newspaper criticizes the government, is it OK to shut down the newspaper?

Yes, because the newspaper should promote national unity

Yes, because criticizing government is not the newspaper's job

No, because newspapers support the paper industry

No, because criticizing government is part of the newspaper's job

NL2:   What are media supposed to do?

Spread rumors about famous and powerful people

Get people in power to take responsibility for their actions

Give people in power the chance to control what people think

Always report negatively about people in power

NL3:   Which of these rights are guaranteed by the constitution in your country?

The right to prevent someone else from saying their opinion at a protest rally

The right to protest by sending hate e-mails to a politician

The right to protest by burning other people's property

The right to say your opinion in public at a protest rally.

NL4:   Please listen to the short story. What should the reporter do?

He should do a favorable report and accept the TV

He should do an unfavorable report and not accept the TV

He should do a neutral report and not accept the TV

He should do a neutral report and try to get the TV

The respondents are told, a politician asks a reporter to come to his home and do a home story on his family. He promises the reporter he will get a flatscreen TV if the report is favorable and positive about him.

NL5:   Please listen to the short story. What should the reporter do?

He should tell the politician who it was

He should tell someone from the opposition party who it was

He should tell another journalist who it was

He should not tell anyone who it was

The respondents are told, a reporter does a critical report about a politician. The report contains information that was given to the reporter by a person that wants to be kept anonymous. The politician wants the reporter to tell him who it was.

Literature

Bennett, Sue J., Maton, Karl A. & Kervin, Lisa K. (2008): The 'digital natives' debate: a critical review of the evidence. British Journal of Educational Technology, 39 (5), 775-786.

Bruns, Axel (2007): Produsage: Towards a Broader Framework for User-Led Content Creation. In: Proceedings of the 8th ACM Conference on Creativity & Cognition. Washington: ACM.

Buckingham, David (2003): Media Education: Literacy, Learning and Contemporary Culture. Polity Press

DW Akademie (2015): Media and information literacy: A human rights-based approach in developing countries. Bonn: Edition DW Akademie. *https://www.dw.com/downloads/29875183/media-information-literacy.pdf*

DW Akademie (2018): Media and information literacy – A practical guidebook for trainers. Bonn: Edition DW Akademie. *https://www.dw.com/de/media-and-information-literacy-a-practical-guidebook-for-trainers-second-edition/a-42430545*

Eubanks, V. (2011): Digital dead end: Fighting for social justice in the information age. Cambridge, MA: MIT Press.

Grizzle, Alton; Tornero, José Manuel Pérez (2016): Media and Information Literacy Against Online Hate, Radical, and Extremist Content. Some Preliminary Research Findings in Relation to Youth and A Research Design. In: Jagtar Singh, Paulette Kerr, Esther Hamburger (eds.): Media and Information Literacy: Reinforcing Human Rights, Countering Radicalization and Extremism. MILID Yearbook 2016. Paris: UNESCO.

Hobbs, Renee (2010): Digital and Media Literacy: a Plan of Action – A White Paper on the Digital and Media Literacy Recommendations of the Knight Commission on the Information Needs of Communities in a Democracy. Washington, D.C.: The Aspen Institute

Hobbs Renee (2017): Create to Learn: Introduction to Digital Literacy. New York: Wiley

IREX (2015): Protect yourself from the flood of information: Citizen Media Literacy Training: Trainer's Guide. Washington: IREX. *https://www.irex.org/sites/default/files/pdf/citizen-media-literacy-project-trainer-manual.pdf*

Kellner, Douglas (1998): Multiple literacies and critical pedagogy in a multicultural society. In: Educational Theory 48(1): 103-122

Potter, W. James (2016): Introduction to Media Literacy. L.A.: SAGE.

Pruitt, J., Adlin, T. (2006): The Persona Lifecycle: Keeping people in mind through-out product design. Morgan Kaufmann, San Francisco

Schmidt, Jan-Hinrik; Paus-Hasebrink, Ingrid; Hasebrink, Uwe (2009): Zur Rolle von Web 2.0-Angeboten im Alltag von Jugendlichen und jungen Erwachsenen. LfM: Düsseldorf.

UNESCO (2013): Media and Information Literacy: Policy & Strategy Guidelines. Paris: UNESCO. *https://books.google.de/books?hl=en&lr=&id=UwaaAwAAQBAJ&oi=fnd&pg=PA6&dq=unesco+media+and+information+literacy+model&ots=b1PP-lzUAC&sig=bN0d6IFw8y4-eAsUL2eodv4x-IcE#v=onepage&q=unesco%20media%20and%20information%20literacy%20model&f=false*

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