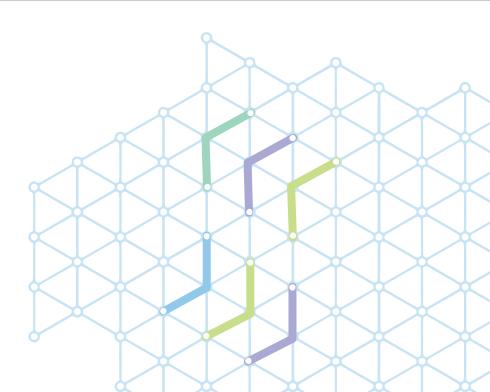


INDEPENDENT FIELD RESEARCH

how-to guide



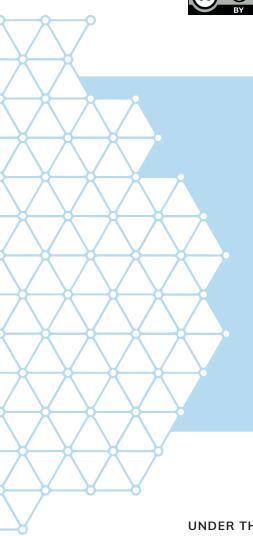


CREDITS & ATTRIBUTION

Published by Societal Platform, an initiative of EkStep Foundation, in 2019.

This work is licensed under a Creative Commons Attribution – No Derivatives 4.0 International License









UNDER THE FOLLOWING TERMS:

- ATTRIBUTION You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
- NO DERIVATIVES If you remix, transform, or build upon the material, you may not distribute the modified material.
- NO ADDITIONAL RESTRICTIONS You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.



CONTENTS

About the guide	1
Overview	3
I. Pre-visit phase	6
II. Visit phase	14
III. Post-visit phase	15
Conclusion	17
Acknowledgment	18



About the guide

The 'how-to' guide is intended to enable individuals and organisations involved in Societal Platform initiatives to get a quick and moderate understanding of the ground reality with respect to user adoption of routine changes¹ envisioned by the Societal Platform.

Routine changes are small changes users adopt in their usual way of doing a certain activity. An example of a routine change among teachers would be to teach students using digital content on smart TVs instead of writing on a board.

Who are the intended users of the guide?

The guide is designed to be practical and useful for professionals—with no or minimal background in research—working for Societal Platform missions, who want to understand the adoption of routine changes among platform users.

How can the research guide help me?

The guide details a systematic approach to conduct basic independent field research, make observations and assess for change in routine among users—owing to the adoption of the solutions² on the platform. Overall, it can help you plan your research and then guide your journey through different phases of the study. The guide can particularly add value in the following ways:

- » STRUCTURE: The guide gives you step-by-step and phaselevel inputs on the activities that need to be done.
- » HOLISTIC APPROACH: It enables you to have a systemic understanding of the concerned Societal Platform before the field visit and provides recommendations on how to produce findings in an understandable manner.
- » ADOPTION METRICS: The process of using relevant parameters such as accessibility, affordance and acceptability (explained in detail in later sections) to assess the user adoption of the envisaged routine changes.
- » ILLUSTRATION: The guide helps you visualise the steps suggested through examples.

ROUTINE CHANGES
are small changes users
adopt in their usual
way of doing a certain
activity

. . .

¹ A small change in a wellestablished routine creates a new routine, leading to the formation of new habits and eventually behaviour change. See, Duhigg, C. (2014). The Power of habit. New York: Random House Trade Paperbacks.

² An example of a solution on the platform is Energised Textbooks (ETB) built on the DIKSHA platform. ETB involves equipping textbooks with QR codes which will have e-learning content linked to the curriculum. See, DIKSHA. (2019). Retrieved from https://diksha.gov.in

What can be expected at the end of the process?

At the end of the research, you will have a sense of whether the solutions on the Societal Platform have led to routine changes among users and how accessible, affordable and relevant is the Societal Platform to them. As a research process, the guide will help in producing the findings (various formats) in terms of each research question identified by you.

What do I need to know before I start with the research guide?

In order to start with the research guide, the first step could be about getting clarity about the Societal Platform approach and the routine changes envisaged by the Societal Platform under study. It would be advisable to have a sense of the local landscape and the stakeholders involved in the initiative, especially the users.

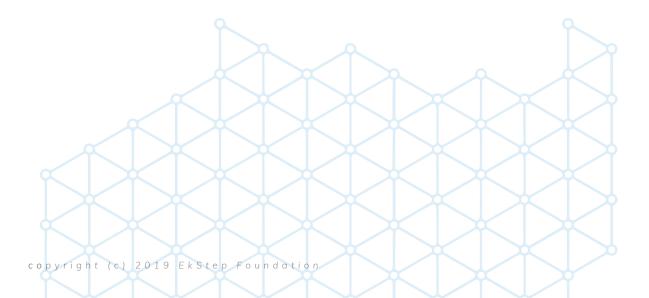
What are the limitations?

- The guide could be applicable only for short-term research.
- The guide is useful only to get a quick understanding of Societal Platform initiatives at different intervals post the launch of the initiative (programme or solutions).
- The guide is solely focused on observations and understanding the adoption of solutions and does not serve as a means to evaluate a solution or the effectiveness of a solution.
- The guide only gives an overview of the activities you need to think of and does not suggest methods.

• • •

IN ORDER TO START WITH
the research guide, the first
step could be about getting
clarity about the Societal
Platform approach and the
routine changes envisaged
by the Societal Platform
under study.





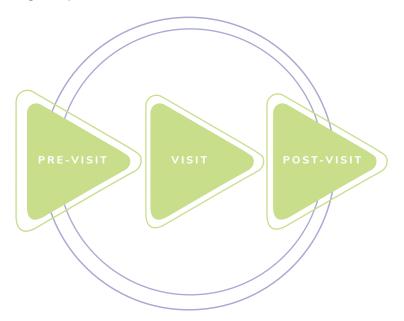
Overview

Research can be organised into three phases: pre-visit, visit, and post-visit. Regardless of each stage being different, activities tend to overlap. For example, in the pre-visit phase, you will need to develop a research plan based on the understanding that you have from secondary research³. Once you are in the field, you might have new information which could lead to revising the research plan with a better understanding.

The three phases help to have a continuous cycle of planning and action. A comprehensive approach is enabled by factoring in different dimensions and perspectives that need to be considered within a research process.

- The 'pre-visit' phase is about understanding the initiative, routine changes and the context of the research, and developing a plan on how to undertake the study. This involves secondary research and coming up with a research plan.
- The 'visit' phase focuses on primary research and day-to-day analysis of the information gathered through the visits.
- » The 'post-visit' phase focuses on the analysis and communication of the research findings. It involves evaluation, and documentation of the information, and data gathered from both primary and secondary research.

Fig. 1, 3 phases of research

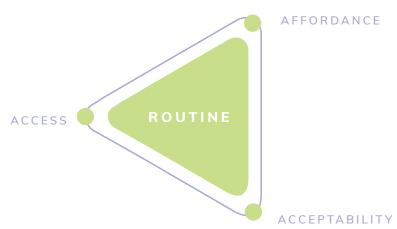


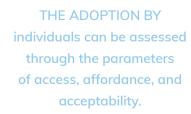
3

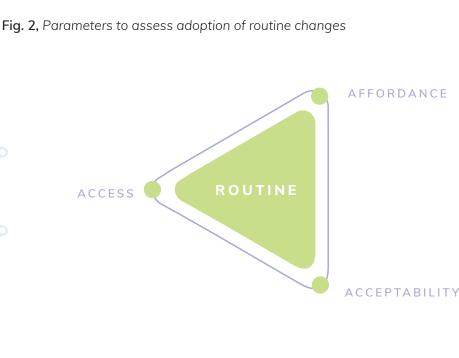
³ Secondary research refers to research conducted using material or data (such as census data, published studies and previous research findings) which have been collected for some other purpose and, therefore, originally with no specific concepts or hypotheses in mind. See, lphofen, R. (2011). Ethical decision-making in social research (p. 208). Basingstoke, England: Palgrave Macmillan.

The activities across phases are designed with a focus on providing direction on studying the adoption of the routine changes envisaged by the platform. The overall adoption of Societal Platforms can be imagined at two levels: individuals and system. The guide restricts itself to the level of individuals. The adoption by individuals can be assessed through the parameters of access, affordance, and acceptability. The assumption is that routine change among users is an effect of these parameters.

- ACCESS is about having zero barriers—or no possibility of denial—to entry at the point of service.
- AFFORDANCE looks for whether the set of choices the platform provides allows every segment of society to use it. In other words, it is about whether all segments of society can afford the cost of accessing (such as distance, time, financial capital, social capital and language) the service.
- ACCEPTABILITY can be defined as the availability of relevant and acceptable options for platform users.







ILLUSTRATION

The guide will use the example of a field research carried out to study Energised TextBooks (ETB) — a solution built on DIKSHA (Digital Infrastructure for Knowledge Sharing) platform.⁴ The ETB initiative is about QR codes printed on school textbooks which can be scanned to access relevant content through DIKSHA mobile application and website.

The research objective was primarily centred on understanding the adoption of DIKSHA from an accessibility aspect, as the project was at its initial stages. The objective was stated as: 'To observe and gauge user experience and engagement, and understand nuances in consumption experiences—for the DIKSHA ETB initiative'. It was focused on understanding user participation in accessing and using the content available on the DIKSHA application and website.

An example of a routine change that could be observed is the change in the practice of how teachers teach. Instead of writing on the board, teachers may now be using a smart screen to show digital content to students. Another example would be the use of QR codes by teachers to refer to lesson plans of other teachers while preparing their lesson plans.

The following are examples of access, affordance and acceptability:

ACCESS (zero barriers to entry at the point of service)

» In DIKSHA mobile application, allowing users to experience the application without any login requirements makes it an open access platform.

AFFORDANCE (ability/possibility to access)

» Users not being able to afford the cost of accessing such as owning smartphones and availability of time, are questions related to affordance.

ACCEPTABILITY (availability of relevant options)

» Availability of good and relevant content according to users.



⁴ www.diksha.gov.in

PRE-VISIT PHASE

The pre-visit phase is a vital phase in terms of gathering information and synthesising it to develop and contribute to the research plan.

KEY CONSIDERATION

It is essential not to allow the secondary research information and analysis to encourage any bias while on the field, although most of the work during this phase would add immense value to the field research.

STFP 1

Understand the context of the research

To start with, it is useful to get the background information you deem necessary for the research. It would primarily be about getting clarity on the objective and the need for the study.

- 1. Identify the people involved in initiating the research.
- 2. Talk to the identified people (including your point of contact).
 - a. Allow them to explain the context behind initiating this research.
 - b. Once you have the context explained by them, the following prompts could help get a more detailed understanding:
 - i. What is the objective of the research?
 - ii. What is the reason behind choosing a particular period to do research?
 - iii. In which stage, the mission is currently on?
 - iv. What is the next stage?
 - Gather information about the phase in which the initiative is currently progressing in terms of the Societal Platform parameters (such as access, affordance and acceptability).
 - d. Discuss how the research findings are expected to contribute, and for what purpose?
 - e. Request a list of people with whom you could have a conversation to understand the initiative.
 - f. Request for existing resources which will help in understanding the Societal Platform better (e.g., previous research findings on the same subject, project proposal, concept note on the next stage of the initiative, etc.).

STEP 2

Understand the initiative

The 'initiative' here could refer to the overall Societal Platform mission with a focus on a particular programme or solution you would want to assess with respect to its adoption. In order to develop a comprehensive basic understanding of the initiative, you could look at the following aspects:

- 1. The mission of the organisation.
- 2. Background to the initiative (you could pose questions such as, why textbooks were chosen to have QR codes and who initiated the project).
- 3. Operational aspect of the initiative (i.e., how it has been implemented on the ground and what is the engagement process a typical user goes through).
- 4. The stakeholders involved.
- 5. Intended outcomes of the initiative.
- 6. Other similar initiatives.
- 7. Communication channel (i.e., who updates about the on-ground and online activities and to whom? Whether communication between actors happen organically or are there standard processes? Who interacts with whom? etc.).
- 8. The claimed performance (based on data, other research findings, etc.).

You could follow the below steps to develop an understanding of the aspects mentioned above:

- Talk to people involved in the initiative (based on the list mentioned in step 1).
- Go through the available resources (e.g., programme design, project plan, progress report, theory of change, monitoring report, interim reports. etc.).
- Talk to external organisations and people who were involved in monitoring or research or assessment of the initiative.

STEP 3

Develop the hypothesis

The research hypothesis is a prediction of a possible outcome (such as routine change) based on the programme plan. Here, the purpose of developing a hypothesis is to guide the research in assessing whether the routine changes have occurred. An in-depth assessment is enabled by breaking down the hypothesis into several questions. The following steps could help you develop the hypothesis and questions:

- 1. Identify the expected routine changes (possible outcomes) from people involved in the mission.
 - For example, teachers in school scanning the QR code on the textbooks through electronic devices, to teach students with digital content, instead of reading from the book or writing on the board.
- 2. Frame the hypothesis in a testable manner (e.g., QR codes on textbooks has led to teachers using digital content (via DIKSHA app and web portal) to teach in class).
- 3. Develop questions to understand the extent of the routine change. The following questions can serve as examples:
 - » Is the routine change adopted by many users?
 - » Is the change consistent?

The hypothesis and the questions can aid in developing the research objective needed to do a focused investigation.

STEP 4

Develop the research objective

The research objective defines the area of study and provides direction to the research. The Societal Platform adoption metrics/parameters (access, affordance and acceptability) are used to develop the objective in relation to the routine change.

KEY CONSIDERATION: -

Adoption parameters are intended to be used as metrics to assess the adoption of the routine changes. It is believed that the adoption of a change in routine is a result of making the change accessible, affordable and relevant for the users.

THE PURPOSE OF developing a hypothesis is to guide the research in assessing whether the routine changes have occurred.



- Identify the topic you want to study in relation to the hypothesis developed. The information gained previously would help you narrow down to a particular topic (e.g., consumption experience of platform users).
- Identify the sub-topics you want to explore. Sub-topics are
 determined to establish the significance of different aspects
 of the topic you want to study. (e.g., user engagement and
 experience with respect to consumption of content on the mobile
 application and website).
 - » State the research objective. For example, the research objective could be stated as, 'to observe and gauge user experience and engagement and understand nuances in consumption experiences—for the DIKSHA ETB initiative'.
- Once you are clear with the objective, identify the adoption
 metrics that need to be assessed keeping in mind the focus of
 the project and its progress (e.g., access was the key adoption
 metric for DIKSHA research as the platform was focused on
 enabling accessibility during that particular period).
- Identify the sub-parameters that will help you get a holistic understanding of the identified adoption metrics.
 - » For example, understanding users' 'awareness' and 'perception' of how to use DIKSHA can enable the understanding of how accessible is DIKSHA to users.
 - » In the case of affordance, the understanding of the 'infrastructure' available for the users can provide a considerable level of understanding of how affordable is DIKSHA, as a digital platform for users.

KEY CONSIDERATION

The same sub-parameter is applicable for different metrics, say, 'awareness', it can be used to understand both access and affordance. For example, understanding users' 'awareness' of how to use DIKSHA can be used to understand access, whereas understanding users' 'awareness' of what is required to use DIKSHA can be used to understand affordance.

Example

TOPIC	SUB-TOPICS	ADOPTION PARAMETERS	SUB-PARAMETERS
Consumption experience	User engagement and user experience	Access Affordance	Awareness (access), awareness (affordance), perception, usage, challenges, processes, behaviour, infrastructure checks and business opportunities

STEP 5

Develop a research plan

The research plan is about defining the questions you would like to answer through the research and how you would like to do it. A research plan broadly involves the following sections:

- Research question (the overarching question you want to answer through the research)
 - a. Frame the question using the research objective developed in step 4 (e.g., How do users of DIKSHA app and website engage with it and what has been their consumption experience?).
 - b. Identify the research questions for each sub-parameter.
 These questions will serve as the sub-questions that will help you answer the overall research problem in a comprehensive manner. The following are some examples of research questions:
 - i. What is the level of awareness of various actors (relevant to the initiative) about DIKSHA and Energised Textbooks?
 - ii. What are the perceptions of different actors (such as teachers, publishers and students) about DIKSHA programme?
 - iii. What is the process being followed to access and use DIKSHA?
 - iv. What do business actors like publishers and mobile data sellers think about DIKSHA?

KEY CONSIDERATION

When you have two or more adoption metrics, the suggestion would be to have questions framed separately concerning each metric. For example, if you are assessing the acceptability metric, one of the questions could be, 'What is the perception of different users about DIKSHA with respect to the content available?'.

Preparation phase

The preparation phase is about setting the stage for detailed secondary research focused on developing a basis of knowledge for conducting primary research (field research).

- a. Identify the topics that need to be understood before going to the field.
 - » Example: Initiative, solution, geographical area, participant group, local community, partner institutions, infrastructure, etc.
- b. Identify information sources that will provide you with relevant information and data (e.g., government documents, programme documents, partner organisations, people who know about the participant group/geographical area, etc.).

Research Methodology

Field research can be done using various methods. Research methodology is about identifying the right techniques to collect information and data relevant to the research questions.

- a. Identify suitable research methodologies.
 - » In the case of DIKSHA ETB example, some of the methods identified were.
 - i. Key informant interviews
 - ii. Observation
 - iii. Activities
 - ♦ Activities were chosen as a method to gather information from 6 to 8-year-old students.
 - iv. Infrastructure checks

Sampling

"Sampling is the process of choosing study units (e.g., people, institutions) from a population of interest. This needs to be done in a way that the sample may help generalise our findings back to the population from which they were chosen." 5 Sampling process involves two steps:

- a. Choosing the sample size (number of units) from the available population.
- b. Choosing a suitable sample population using one of several sampling methods (e.g., random sampling, stratified sampling, etc.). The choice of your sample population needs to consider several factors, including application of development lenses (e.g., gender, disability, caste, age, socio-economic profile, etc.).

In the DIKSHA ETB research, 53 teachers were chosen from 10 schools, with 20 male teachers and 33 female teachers. It also included two visually impaired teachers. Overall, it was ensured that there was adequate representation of teachers from different classes, different schools, different subjects, among others.

Analysis plan

Analysis plan is about deciding the analysis methods that could effectively analyse quantitative and qualitative information gathered through research.

- a. Identify the information/data that you will get out of the research.
- b. Identify the indicative parameters that you would like to showcase (e.g., level of awareness in terms of access).
- c. Decide the analysis method that would be able to bridge the gap between the data collected and the presentation of findings in terms of indicators or qualitative descriptions.

DIKSHA ETB research did not follow one clear method of analysis. However, 'thematic content analysis' was one of the methods used to analyse the information, which especially helped in categorising the processed information by different parameters such as perception, behaviour, and challenges.

Output

Develop a clear idea of how the findings are going to be presented. It could be a presentation, research report, video, to name a few.



⁵ Trachoma, William M.K. (2006). Sampling. Retrieved March 2. 2019 From: http://www. socialresearchmethods.net/kb/ sampling.php

⁶ 'Thematic Content Analysis' is one of the several research analysis methods used to describe and analyse the gathered data.

STEP 6

Secondary Research

Secondary research is an extension of the preparation phase. It is primarily a desk-based research process except for some interviews and conversations with relevant people depending on the context.

The secondary research makes use of the topics and information sources identified in the preparation phase to gather and synthesise information—to develop an understanding of the topics identified. It will be providing information in addition to the information gathered through steps 1 and 2.

STEP 7

Present and revise the research plan

In this step, you present your research plan to the people who have tasked you with the research to get their inputs and feedback. Once you have feedback on your research plan, you revise the research plan accordingly. The process is an iterative one until both sets of actors are convinced with the research plan.

STEP 8

Develop content for primary research

The final step of the pre-visit phase is to develop content to execute your research methods in the field. For example, preparing questions for interviews, designing activities, etc.

Several open-ended questions (e.g., what do you think of having QR codes in textbooks?) were developed to support interviews in the FTB research.



II VISIT PHASE

KEY CONSIDERATION

"Prior understandings of the phenomenon to be researched should be seen as provisional and should be transcended with [the discovery of] new information with which they are not consistent."

The visit phase is all about primary research. Apart from executing the research plan, it' involves two steps that are done frequently to get the best possible outcomes from the field visit.

STEP 1

Analyse the information

Once you're on the field, you will get information through the research process, which could be interviews, observations, etc. The information gathered then needs to be analysed frequently (at the end of the day for basic research) to revise your methodology and research depending on what you are witnessing and collecting in terms of information. Your initial plan may not always be the ideal plan that could get you the required information. Analyse information daily to represent the research notes in a descriptive/analytical manner, in relation to the research questions.

STEP 2

Revise the research plan

Revisit the research plan if the necessary information is not coming through in the existing research process.

KEY CONSIDERATION

"Investigators who conduct research with human subjects are responsible for the protection of participants' rights, safety, and welfare, and for scientific integrity.

Each investigator and research site must look to the local laws and ethical standards that apply to their role in a

research project."8

⁷ Kleining, Gerhard: Umriß zu einer Methodologie qualitativer Sozialforschung in: Kölner Zeitschrift für Soziologie und Sozialpsychologie 34 [1982]: 231

⁸ Merritt MW, Labrique AB, Katz J, Rashid M, West KP Jr, Pettit J (2010) A Field Training Guide for Human Subjects Research Ethics. PLoS Med 7(10): e1000349. https://

doi.org/10.1371/journal.

pmed.1000349

III POST-VISIT PHASE

In the final stage of research, it is critical to work in an openminded way to analyse the obtained data. Group discussions or discussions with other members related/not related to the project would pool in multiple perspectives that might help interpret the information effectively.

KEY CONSIDERATION

There are various ways a piece of information can be interpreted. The researcher should strive to take into account all relevant factors before any interpretation and generalisation.

STEP 1

Analysis

- Perform the analysis based on the analysis method identified earlier.
- Identify patterns, causal relationships, and associations.
 - » In the ETB research, a causal relationship of parents' awareness about DIKSHA being proportional to their socio-economic condition was identified.
- Interpret information by looking at it from different perspectives and look for facts that could support your interpretation.
 - » For example, relatively less usage of DIKSHA app among 9th and 10th class students could be interpreted as parents do not want to give mobile phones to children preparing for board exams or parents do not want to provide mobile phones to girls of specific age group because of social and cultural conditioning.
- Test the hypothesis
 - » Based on the data available through primary and secondary research, and with the data analysis performed after the visit, answer whether the hypothesis is true or not.

⁹ Lounsbury, J., & Aldrich, F. (1986). Introduction to geographic field methods and techniques. Columbus: C.E. Merrill Pub. Co.

KEY CONSIDERATION

"In the final analysis, the success of a research problem is judged on the manner in which it was carried out rather than on whether the conclusions were positive, negative, or inconclusive."⁹

STEP 2

Document the findings

 Organise information according to each adoption parameter and its sub-parameters (via research questions).

STEP 3

Communicate the findings

The entire research finally comes down to the findings. It is thus essential to find the most effective way of communicating the findings. Consider the following factors while identifying the best possible form of communication:

- Who is the audience?
- What is the research objective?
- What would be the most effective way of communication for the intended audience? (e.g., verbal, presentation, written, graphic, etc.)

In the DIKSHA ETB research, slides presentation was used to communicate the findings. The presentation of the findings should cover all aspects of the study to enable a holistic understanding for the audience. The following sections were used to convey the ETB research results:

- 1. Research objective
- 2. Sampling
- 3. Methodology
- 4. Context
- 5. Findings
 - a. Each research question
 - b. Hypothesis
- 6. User suggestions
- 7. Recommendations

The sections given above are examples of information that can be conveyed as part of your findings, irrespective of the medium of communication.

Conclusion

The guide offers a systematic and simple research approach that can be referred to by professionals with no or minimal research background, to understand the user adoption of the routine changes imagined by Societal Platforms. It provides relevant Societal Platform perspective to common research actions. The guide is not expected to help in understanding the impact of Societal Platform initiatives. At the end of the day, the independent field guide is merely intended to serve as a reference document during the research process.

ACKNOWLEDGMENTS

Research & Writing

Naveen Varshan (EkStep Foundation)

Research Advisors

Sanjay Purohit & Deepika Mogilishetty (EkStep Foundation)

Design

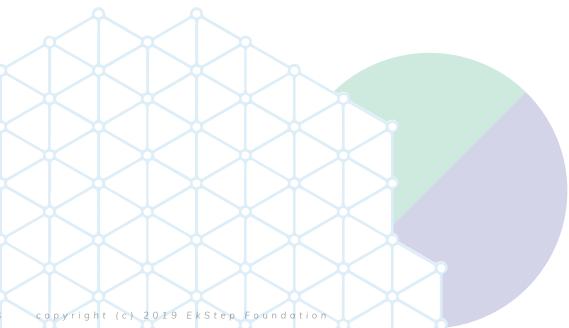
The Other Design Studio

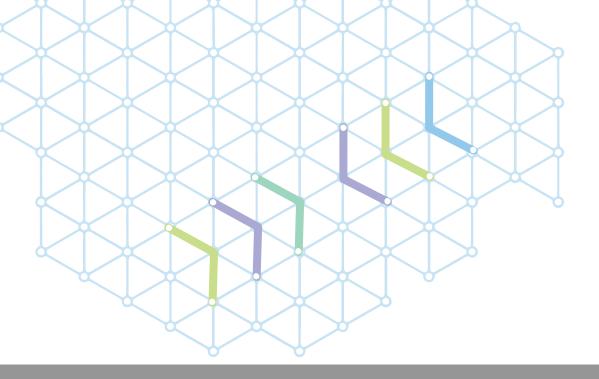
We appreciate your feedback on the report. Please write with your comments, recommendations, and suggestions to: Naveen Varshan at naveen@societalplatform.org

FOLLOW US

Visit us at: www.societalplatform.org & www.ekstep.org

Twitter: @SocietalPlatfrm & @eksteporg







www.societalplatform.org info@societalplatform.org

THIS WORK IS LICENSED UNDER A

Creative Commons Attribution - No Derivatives 4.0 International License

