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**Digitalisation of Capacity Building for the Banking Correspondent Agents (BCAs):
Findings from Field Implementation and Proposition for Scaling Up**

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Digitalisation of Capacity Building for the Banking Correspondent Agents (BCAs): Findings from Field Implementation and Proposition for Scaling Up

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ABSTRACT

Financial inclusion and digital financial inclusion have been priority across countries, particularly in those that have large number of people operating outside the formal financial and banking framework. Digital financial literacy has been recognized as the first step towards this transformation which would allow many small holders to operate within and receive support from the formal financial sector.

The Banking Correspondence Agents or BCAs are the last mile linkage between the banking & financial institutions. The “Agent Banking Model” has been accepted in several countries as an innovative and viable option to reach the unreached. However, there are gaps in this model that requires addressing, particularly from the learning perspective.

To address digital financial literacy training of the BCAs and the end consumers, the National Institute of Banking Management (NIBM) did a pilot project in four districts of Tamil Nadu to train the BCAs and the end users in digital financial literacy using mobile application. The primary reason for looking at a MOOCS training was to understand the scalability and adaptability in diverse demographic and geographic situations. (a) The pilot study was analysed, and certain gaps were identified such as: (b) Content diversity and utility following demography and primary occupation in a specific locale. (c) Locale specific cases where the primary assumption may not be valid (such as livelihood in a specific geo-cultural context). (d) The mobile interface and minimum critical cognitive capacity to use the mobile application. (e) A comprehensive business model for the Banking Corporates and the Correspondence agents that could make the initiative self-sustainable. (f) A strategy to deliver it at the National level.

The paper suggests a plausible business model around a mobile application implementation across the nation and a forward plan to achieve it.

The paper’s aim is to outline a proposal for scaling up and develop a business proposition around the scaling up so that the initiative could be sustained as a viable training and livelihood model for the Business correspondence agents.

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Digitalisation of capacity building for the Banking Correspondent Agents (BCAs): Findings from field implementation and proposition for scaling up¹

1. Background and context of the BCA capacity building

Financial Inclusion and digital financial inclusion have been recognized by the Government of India as a key driver for sustained and inclusive economic growth that helps to reduce economic inequality and address poverty. Improved access to financial services is a primary enabler for seven of the 17 Sustainable Development Goals.

The Government of India, in the last decade, has focused on financial outreach to all sections of the society, emphasizing digital transactions, digital financial operations and support; a well-developed digital and mobile network, affordability of mobile phone technology and Indian Society's increased ability for digitally supported financial operations and transactions have driven the thought of digital financial literacy for every one (particularly after the pandemic that actually boosted digital financial transactions).

Innovative Banking Agent Model or the "agent banking model" is one of the most effective and innovative financial support solutions that addresses the unbanked and the underbanked communities. In absence of the relevant infrastructure (such as ATMs) and presence of the Financial Institutions (such as Bank branches) the Banking Correspondent Agents represents the financial access to many marginal, tribal, and remote communities. At the same time BCAs provide crucial services for balanced financial development of the society. India follows both bank-based and nonbank-based (where the agents belong to a non-banking financial support institution) agent banking model.

The Business Correspondent Agents (BCAs) or Banking Agents (BAs) are widely used delivery channels for the banks for financial inclusion. This approach uses the services of retail vendors/outlets, post offices, and agents working for the large corporates to provide banking services at the doorsteps of customers with the help of digital tools.

While it remains a viable model for reaching large number of people and cost effectiveness (reduced infrastructural investments by the banking and finance institutions), there were gaps identified as below:

1. Lack of knowledge in terms of banking norms, technical know-how, frequency of knowledge upgradation and poor digital financial transaction and scopes among the BCAs.
2. Lack of financial literacy and scopes of financial support (Government and banking schemes) among BCAs as well as among the end consumers.

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3. Technical issues such as unavailability of smart phones and efficiency in using them, and infrastructure barriers such as lack of network coverage when using technological platforms were identified as one of the prominent hinderance in digital financial literacy and digital financial capabilities.
4. Lack of capacity building as well as lack of technology support by the Banking Corporates led to weak support of the BCAs to assist end consumers particularly in digital financial services.
5. In the remote, less populated areas low customer base leads to low turnover and low margin. Similarly, inability to cover large areas and reaching larger numbers of end consumers, often, makes the BCA model Unviable.

Currently all candidates are to pass a certification examination that allows them to become and practice as a BCA. However, the certification is more of compliance formalities rather than having any deeper impact in increased efficiency or better operational/ managerial skills. Also, there are no training, currently, so that a BCA can provide holistic financial and economic support system to the end consumer.

The programme followed a “Continuous or Lifelong learning approach” that envisaged a continued learning process that enables the BCAs in developing new skills, understanding the change in the National and State’s finance and banking schemes as well as economic (livelihood opportunities).

The focus and aim of the first phase were envisaged as:

1. Enhancing the capacity and empower the BCAs for supporting financial inclusion, credit management and rural & agricultural enterprises.
2. To develop a framework that would support continuous upgradation of the skills and knowledge of the BCAs that would lead to overall gain of the farmers, financial institutions, BC corporates, BCAs, and governments.
3. To develop a self-sustaining, adaptive technology supported model which is cost effective, socially acceptable and supports the continually changing learning needs from economic development perspective.
4. To integrate digital financial literacy and livelihood learning for better applicability and economic development impact
5. To use technologies such as mobile phones and learning platform driven by MOBI MOOCs for transforming BCAs into an efficient cadre for financial inclusion.

2. Summary of survey and findings from the baseline survey conducted during the 2021-22 cycle:

[Table 1]

NIBM had conducted several online and face to face meetings with the Reserve Bank of India (RBI), National Centre for Financial Education (NCFE), National Bank for Agriculture and Rural Development (NABARD), major Banks and BC federations to

understand and decide on the focus and parameters of the baseline study. Based on the consultation with these institutions, NIBM had developed the questionnaire for the baseline survey and the learning needs assessment. The final survey approach was decided based on stakeholder consultations, including VIDYAL (<http://vidyalngdo.in/profile.htm>).

The baseline covered three BC Corporates' who had suggested 1015 BCAs and 13 BCA supervisors from 14 districts of their operations in Tamil Nadu. Tata Consultancy Services (TCS) had the largest number of BCAs in the said 14 sample districts.

The baseline study covered four sample districts of Tamil Nadu selected based on the Human Development Index (HDI). The selection criteria considered districts with considerably high HDI, high HDI, medium HDI, and low HDI. A randomly selected sample of 10% of the total BCAs were selected from the four sample districts, covering a total 112 BCAs.

Out of the surveyed BCAs 71% of BCAs were women and 29% men (Figure 1). Theni district (the district where L3 programme of COL began and continues to support the farmers, especially the women farmers) reported the higher percentage of women BCAs (80%). However, it requires further studies to establish a direct linkage between the presence of L3 programme and the higher percentage of women BCAs. Virudhunagar district reported the highest percentage of men BCAs (43.5%) per cent. The overall average age of BCAs surveyed was 37.5 years (Figure 2). The average age of the BCAs in Namakkal and Theni is around 35 years and average age in Dindigul and Virudhunagar is around 40 years. A very small percentage of BCAs are from outside the general social categories (Figure 3). This shows that there is a need to promote BCAs from socially disadvantage and marginalised communities.

[Figure 1]

More than 47 per cent of the BCAs had till XIIth level formal education (Figure 4). These agents require further education through either informal or non-formal channels to be able to understand and transfer the much-needed learning about financial literacy as well as economic opportunities. At this level of education, often, it is difficult for the BCAs to appreciate or understand the changes in the financial sector and emerging opportunities for economic development as well as livelihood. Without continued learning, it is difficult for the BCAs to undertake banking business, awareness development of the end consumers and ability to use the digital financial technology platforms with due diligence, maintained compliance and achieving business targets of the Banking Corporates. At the same time, the BCAs with graduations (and not necessarily from finance related fields or subjects), would require continuous training in finance and relevant non-financial operations.

[Figure 2]

[Figure 3]

78.6% of the BCAs surveyed are employed only as "Business Correspondent" agents and are not engaged in any other type of economic activity. The positive side of it is the focus and efforts put in by the BCAs in reaching the end consumers and reaching

the business targets; whereas the negative side is their insufficient income in areas where the business is lean or in seasons when the BCA business is difficult due to remoteness, traveling difficulties or lack of economic activities by the end consumers. It is important that for such difficult times or situations, the BCAs are trained to engage in other economic activities for a sustainable livelihood. For an example: in Virudhunagar district, more than 50 per cent of the BCAs are engaged in other livelihood such as agriculture, very small enterprises etc.

[Figure 4]

The experience of a BCA is very important for the sustainability of the agent model and financial inclusion. The experience is directly linked to a BCA's ability to contextualise the learning process, link financial literacy and economic scopes with locally available and plausible livelihood and seek information through the learning system that are locale specific and relevant. This also heightens the BCA's contribution towards BC business development and the development of the Banking Corporates involved. From the survey, the average experience of the BCAs in Dindigul was found to be maximum of 88 months (7 years and 4 months) as compared to the BCAs in Theni, which was 67 months (6 years and 7 months).

3. Operational roles of various organizations involved in 2021-22 and Implementation process followed in 2021-22

The primary implementation organization was NIBM with ground support from VIDYAL and the Banking corporates. However, for research and development of content development NIBM had several online and face to face consultations with important financial institutions and policy drivers at the National level such as the Reserve Bank of India. In a nutshell the following diagram represents the stakeholders and roles played by them:

[Diagram 1]

While the implementation model was successful as a pilot, scaling up would require modifications in the said model. When the implementation becomes multi-location at the National level, involving civil society organizations for all field coordination will be difficult both in terms of resources involved and the complexity of coordination involved. Also, for scaling up, one of the primary requirements would be to contextualise the content to multiple geo-cultural situations, aligning the content with various local governance support as well as locale specific opportunities. One of the primary drawbacks noticed was the different layers of communication and coordination (Implementation driver- Ground level implementing agency- BCs- BCA supervisors- BCAs- end consumers); this long chain, in a large scale would be difficult to maintain and monitor. Also, data collected through such a long communication chain may lead to unfiltered, unsorted, and wrong data.

4. Context of the new roadmap suggested (shift towards digitally enabling the implementation process and reaching the end-consumers directly through the mobile application)

Reviewing the complexity involved in the entire process of scaling up, the forward plan was to automatize the system as much as possible so that the nodal agency (implementation driver/ NIBM) can directly reach the different levels of learners (BCA supervisors, BCAs, and the end consumers) to address their specific learning needs. A better and leaner approach would be strengthening the technology involved (MOBI-MOOCs and the mobile application) and directly reach the BCA supervisors, BCAs, and the end consumers, both for learning as well as Monitoring and Evaluation. In this model, the BCs can analyse the data received directly from the application and do necessary analysis and either take corrective measures or report to NIBM. This may require training the BCs and their officials (executives and BCA supervisors or district/ cluster level coordinators) in monitoring and evaluation. Which, in a way adds to the self-sustainability assurance of the initiative. The new roadmap could be sketched as below:

[Diagram 2]

5. Design Analysis of the current mobile application and the YouTube channel:

The proposed model requires a different approach to the content and the learning design. Whereas a strong technology centred approach offers several benefits at the National level, the backend, and the interface along with the content delivery requires careful re-design. Some of the key criteria would be as followed:

1. Contextualization of content for multiple geographical and cultural dimensions
2. More content in audio and cater to differential bandwidth availability.
3. Easier to navigate and understand mobile application interface with log ins for different users.
4. Include supportive content through Government or financial institution website links.
5. Increase in dynamic content by aggregating content from relevant websites or data bases that updates content on a regular basis (such as Agromet information or agriculture market and input prices)
6. More content on livelihood and economic development
7. Essential governance information and/ or links to relevant websites or information on available mobile applications (such as Aadhaar or UPI linking)

Currently, the above parameters are not strongly present in the videos or the design of the mobile applications. For an example, the videos that have been used are third party content and not apt for the context of India or a part of India. Following which, in the new proposal focus has been given to develop contextual video content and of shorter durations, so that they could be linked through the MOBI-MOOCs and not necessarily would involve high bandwidth for accessing the YouTube channel:

[Image 1]

[Image 2]

[Image 3]

In terms of curation of the YouTube channel, it must have relevant links (image 03). Without which the interest of the user to learn and ability follow focused content cannot be judged, which, is a deterrent in continuous learning needs assessment and understanding the increased capacity of user to utilize horizontal learning channels.

The mobile application, in the context of the new roadmap proposed requires several improvements in terms of navigation and user interface; for an example, it may require a separate log in for BC Executives, BCA supervisors/ coordinators and the BCAs. It might also require language and location preferences at the log in if the initiative takes off in multiple locations and/ or at the National level.

Analysis of some details of the existing App:

The current log-in does not suggest if a learner requires to register prior to accessing the content and the learning. It also limits the learners at two levels, whereas there are possibilities of other levels of learners.

[Image 4]

The learning content landing screen for both the users say, “BCA capacity building”. However, the learner must be assured that she continues to be in the right section, dedicated to her learning. Also, the navigation is limited to a back button and restricts the learner’s navigation capacity/ follow content lead.

[Image 5]

[Image 6]

6. Suggested Design direction for the mobile app with reasoning.

The first/ landing screen and primary navigation (till registration and enrolment, image 07)

A. Language Selection Screen

- 1) The first page in the flow is the language selection page as this app would cater to a diverse learner base in multiple locations; hence language selection has been given priority.
- 2) The selected language is indicated by the check mark and the bordered tile. To reassure the button below (in blue) its language to the selected one.

B. Enrolment Screen

- 1) Easy to understand Dropdowns are given wherever possible for minimizing typing and ease of use.
- 2) Clear Instructions are given in the text fields for easier understanding of the required input.

C. Profile Selection Screen

- 1) A clear “back to language” selection option is provided to help the learners understand where this button will lead them. This can be seen on all possible screens to assist the learner and easy navigation to & from.
- 2) A strong profile presence of the profile selected to prevent confusion while logging in.

[Image 7]

Sign in and home screen, the secondary tasks (image 08)

D. Sign In Screen

- 1) A microphone option is given in the learnername text field for easier input for the learners who are not comfortable with typing text.

E. Home Screen

- 1) Clear iconography is used for the learner to understand and be sure about the titles and functions.
- 2) The profile type is mentioned along with the profile picture as well as a personalized message to assure the learner about the log in she is using as well as make her feel more comfortable while using the app.
- 3) Important links to relevant government websites are presented below with a “see more” option to enable the learner to seek more information.
- 4) A universal Search bar is added to search for anything inside of the app at one single place. This search bar trend is continued on every page to make information or functions search easy.

[Image 8 (a), (b) & (c)]

Tertiary tasks, learning and content navigation (image 09)

F. Voice Messages, Text Messages, Events and Notice Board

- 1) An indicator stating the number of new messages (unread) is given below the title. “NEW!” labels are further added to unread messages to make them easily identifiable. This intervention is followed throughout the design suggestion.
- 2) The instructions are highlighted in grey to make sure that the learner takes the right step.
- 3) Play, Pause and Replay options with a timeline are suggested for controlling the voice messages.

- 4) Links are highlighted in blue to make the learner differentiate between clickable content leading to actions. This is done to maintain the consistency of the application.

G. Feedback

- 1) Two different input methods are suggested for the feedback: voice input or text. The learner can choose any based on their liking and comfort levels. Support instructions in text are given for easier understanding.
- 2) A history option is provided for assisting the learners for their previous feedbacks.

H. Video, Images and PDFs

- 1) A download button is provided in case the learner wishes to do so and view the content in absence of internet connections or are in low bandwidth access.
- 2) Learners can also view the content natively in the application if they wish to.

[Image 9 (a), (b) & (c)]

[Image 10]

[Image 11]

[Image 12]

[Image 13]

I. Surveys

- 1) Dropdowns are Given as input methods for convenience and making the survey less time consuming with predefined answers.
- 2) Titles are given to surveys and the profile they belong to, to make the assessment easier and reduce confusion with other learners.

The design proposed are based on the following parameters:

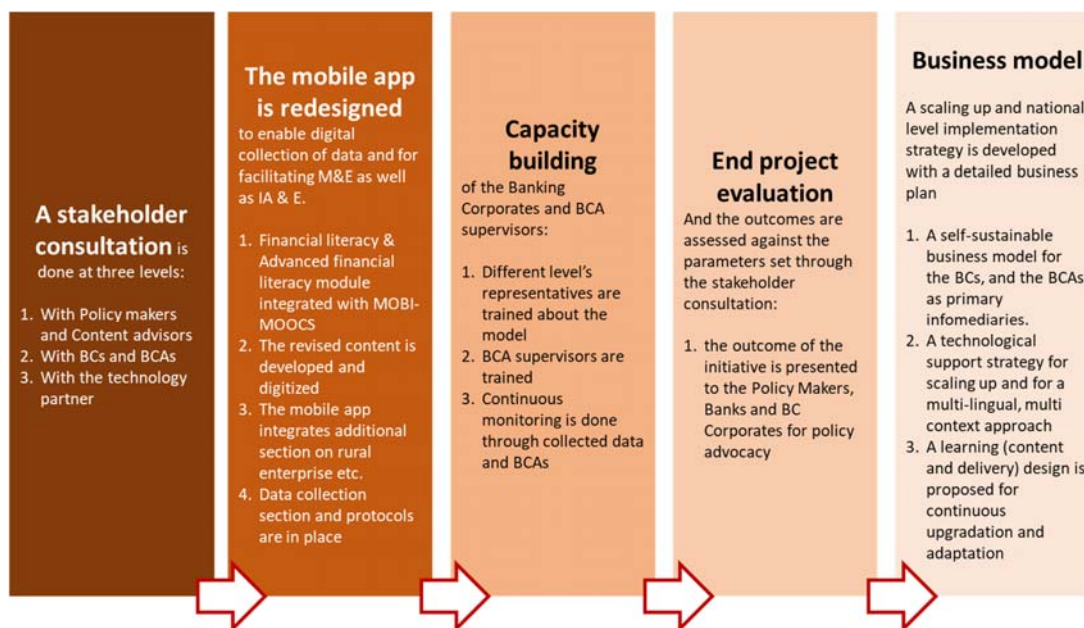
1. Considerations for more than one level of learners (BC executives, BCA supervisors, BCAs, and the end consumers)
2. Applicable to multiple geo-cultural contexts with language diversity (a necessity for National level implementation)
3. Ease of use to accommodate not so educated learners (learners with difficulties in text input or reading)
4. Easily identifiable task commands and navigation
5. Double check on every task and command for assurance to learners with less confidence in operating mobile phones

Based on the design criteria and the navigation patter the following task flow is proposed as a design guideline for the mobile application

[Image 14]

7. Conclusion and the path forward

While the initiative is extremely timely (with Indian Government’s drive for digital and financial inclusion) and the new roadmap of technologically enabling financial literacy and economic development is very promising, it would take substantial investment in the initial stages for making it successful. For an example, the content development alone, in different language and for different contexts is time and resource intensive. It would take more than just a year even to demonstrate the ability and the capacity of the new roadmap followed. It is important that a business model is carefully crafted to support such an ambitious, but necessary initiative. It is practically impossible for NIBM to actively the initiative for the entire piloting in multiple locations including guiding the content development and packaging phase. It is, thus, suggested that a pilot around the technology enabled process) is done and it is used to pitch the pilot for a commercial venture (with supporting business model) to a large, national level Banking Corporate such as TCS. The business model could be developed in consultation with RBI, NCFE, and NABARD to include allied learning that is essential for balanced economic development. At the same time, it would be necessary to involve Government representation for linking the envisaged app to relevant governance information systems. A basic outline of the probable implementation methodology could be as followed:



In a nutshell, the following recommendations are made for the sustainability and the success of the initiative:

1. The next phase of implementation (July 2023-June 2024), must be conducted with the aim that the implementation showcases the success of a technology enabled

learning where all the different level learners have equal access to their relevant learning (BC corporate executives, BCA supervisors, BCAs as well as the end consumers)

2. The pilot focuses on:
 - a) Contextualization of content and approaches for locale specific applications
 - b) The learning delivery aggregates all possible allied information that supports post-learning activities or application of the learning (such as availing government schemes/ loans or linking with a UPI app)
 - c) The learning includes livelihood learning (aggregated from third party content through MOBI-MOOCs and the mobile application)
 - d) Additional information is provided or enabled through an integrated universal search and relevant links (as shown in the new design) for supporting the learner as and when she seeks further information.
 - e) The MOBI-MOOCs includes continued and advanced learning based on the continuous learning assessment done through the mobile app.
3. A suggestive business model has been developed that is vetted through consultation with various stakeholders. The model will be detailed following the national level implementation and stakeholder consultation.

Table 1
BCAs in Baseline Survey

| <i>Sl.No.</i> | <i>District</i> | <i>HDI categories</i> | <i>Name of BC Corporates</i> | | | <i>Total</i> |
|---------------|-----------------|-----------------------|------------------------------|---------------|-------------------|--------------|
| | | | <i>TCS</i> | <i>Atyati</i> | <i>Sanjeevani</i> | |
| 01 | Theni | low HDI | 8 | 2 | 15 | 25 |
| 02 | Dindigul | medium HDI | 7 | 1 | 22 | 30 |
| 03 | Virudhunagar | high HDI | 16 | 5 | 2 | 23 |
| 04 | Namakkal | very high HDI | 31 | 3 | 0 | 34 |
| Total | | | 62 | 11 | 39 | 112 |

Figure 1
Gender of BCAs

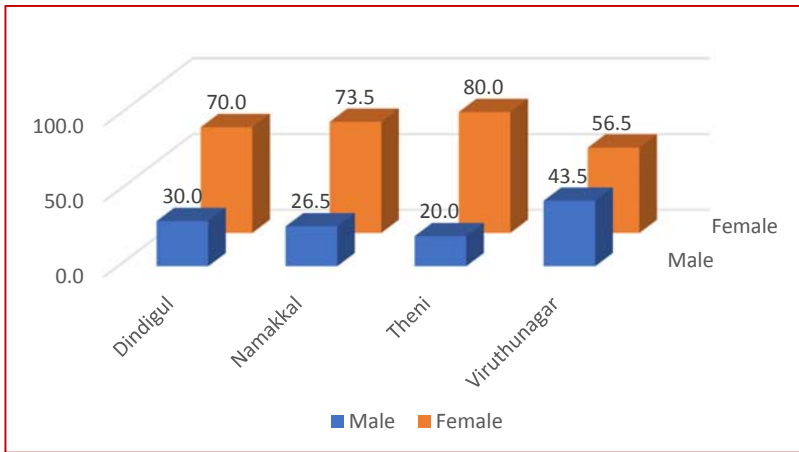


Figure 2
Average Age of the BCAs (years)

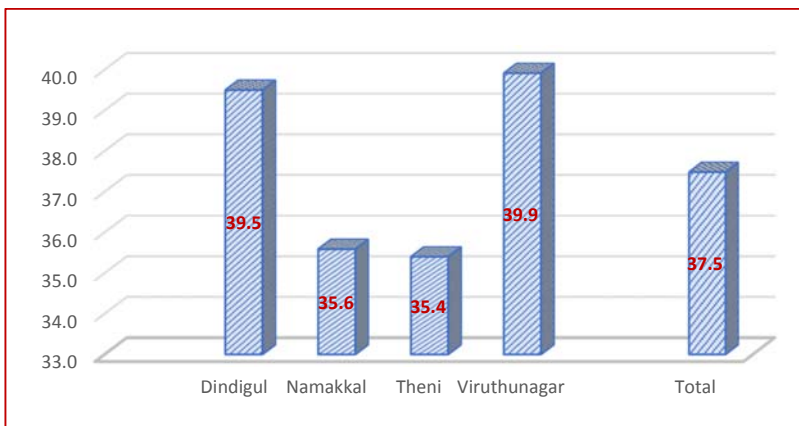


Figure 3
Social Category of the BCAs

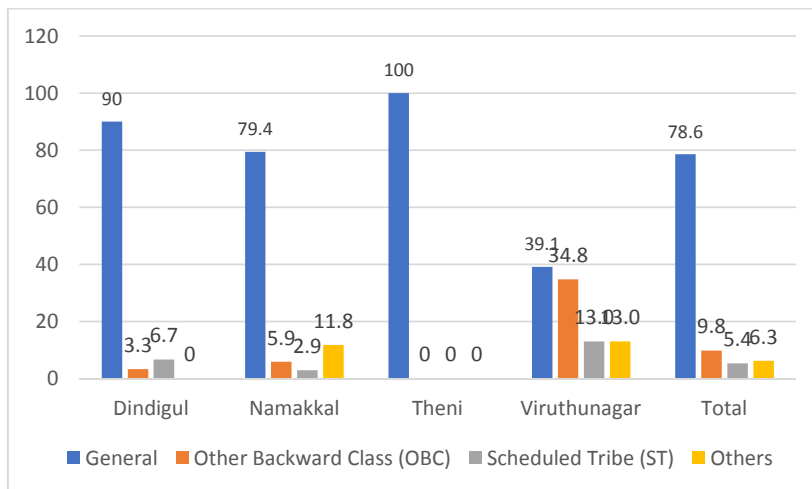


Figure 4
Educational Qualification of BCAs

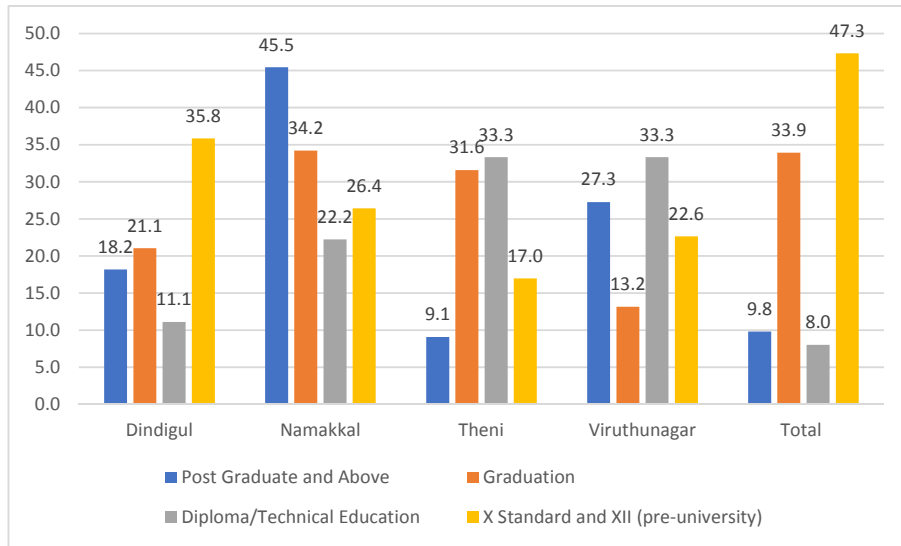


Diagram 1
implementation in the 2021-22 cycle- organizational network and implementation flow.

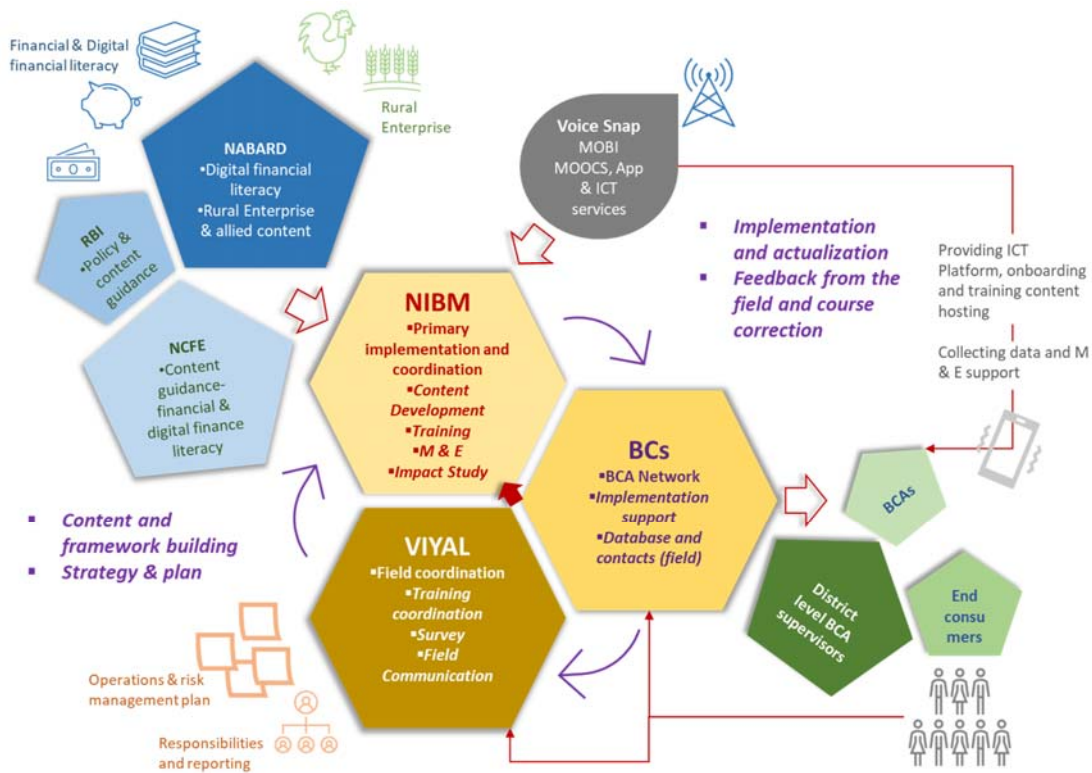


Diagram 2
proposed roadmap around MOBI-MOOCs and the mobile application.

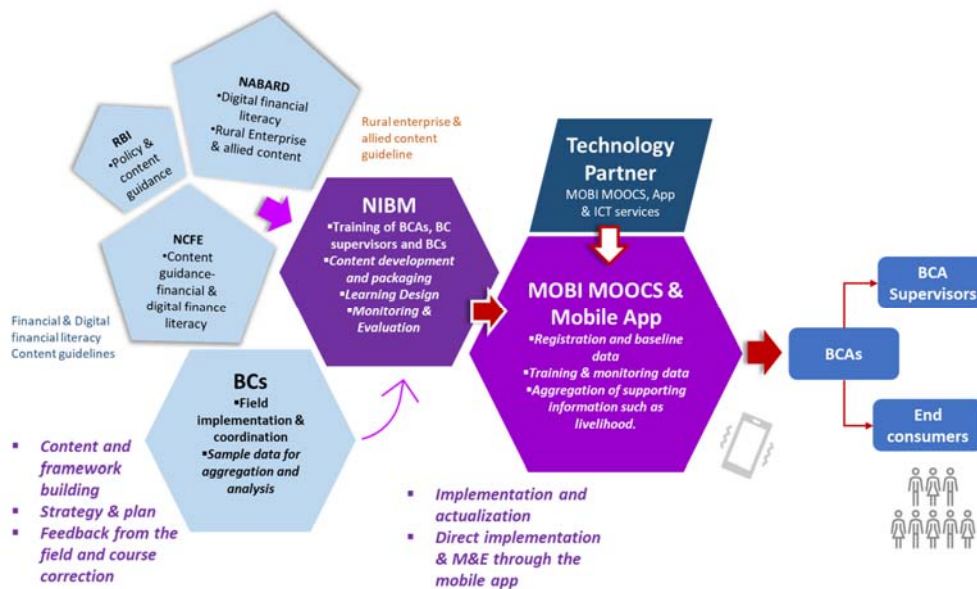


Image 1 & 2
Current videos on the YouTube channel requires contextualization.

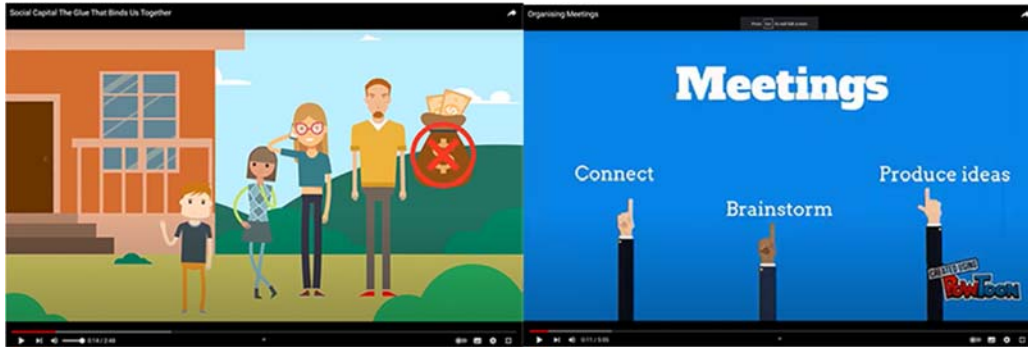


Image 3
Curation needed for the channel so that the video links shown are of relevance (right side information bar)



Image 4
Log-in/ landing screen for the learners in the existing app

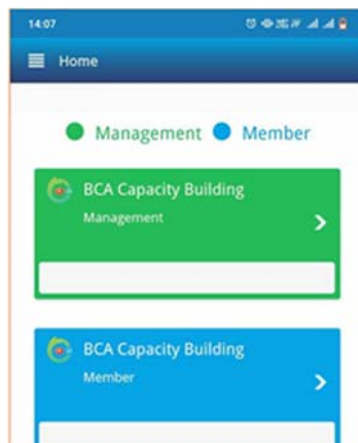


Image 5
Main landing screen for the learners in the learning content section

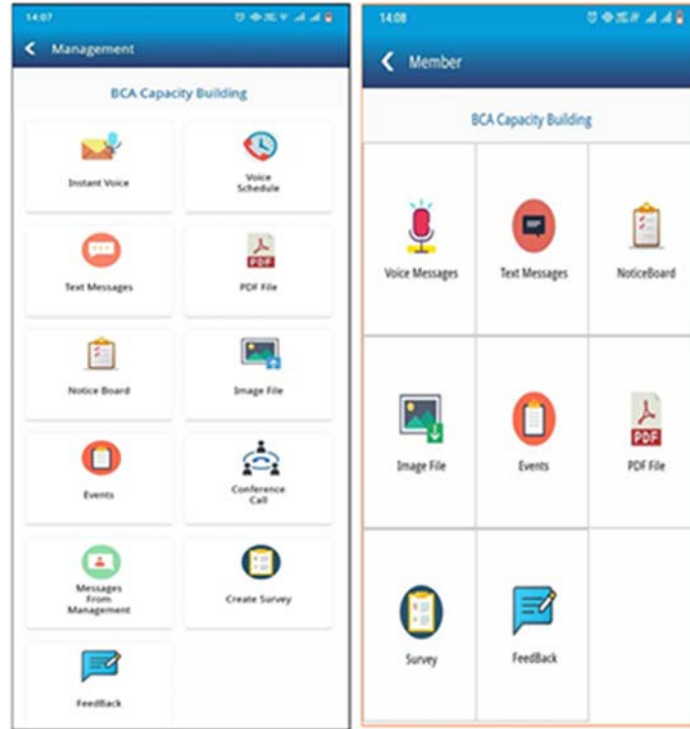


Image 6
Content focused windows in the existing app- information given are cluttered and important parts such as the link, image upload or the survey notice are not highlighted.

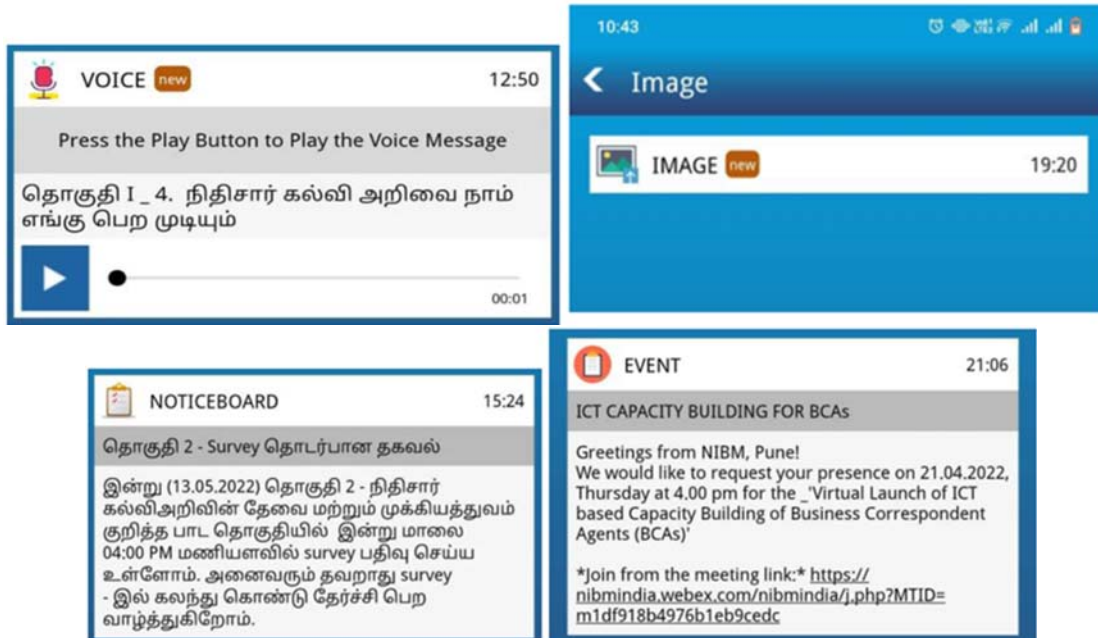


Image 7
Proposed landing page (language selection), enrolment and profile selection screen interface.

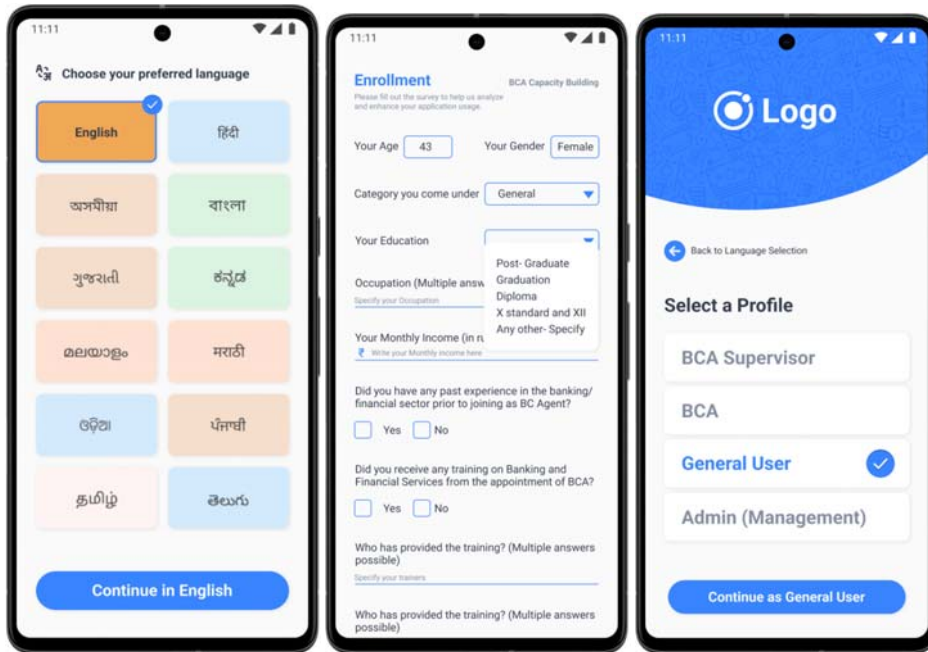


Image 8
a) Sign in, b) Management profile landing & c) BCA profile landing.

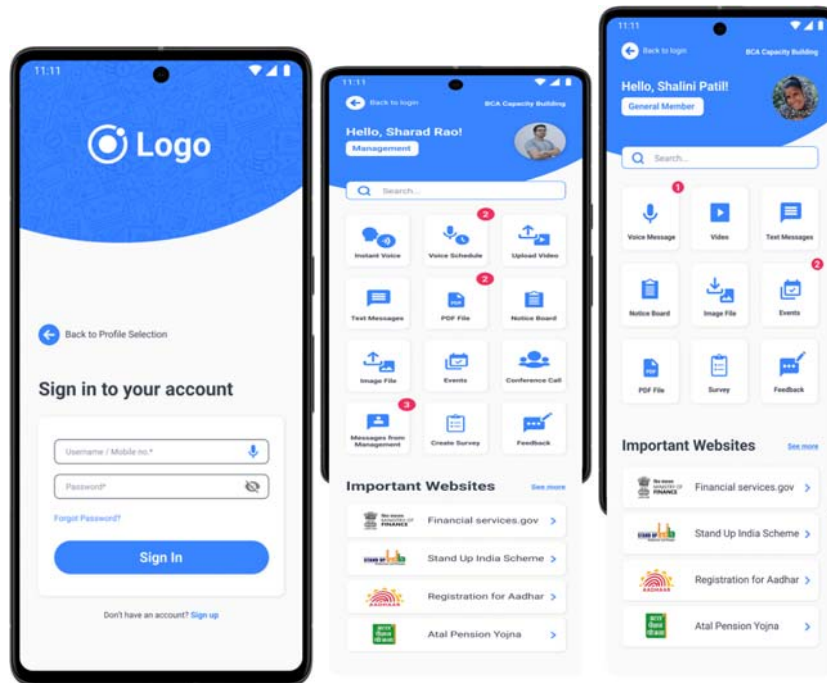


Image 9
a) Voice messages, b) Text messages & c) Feedback.

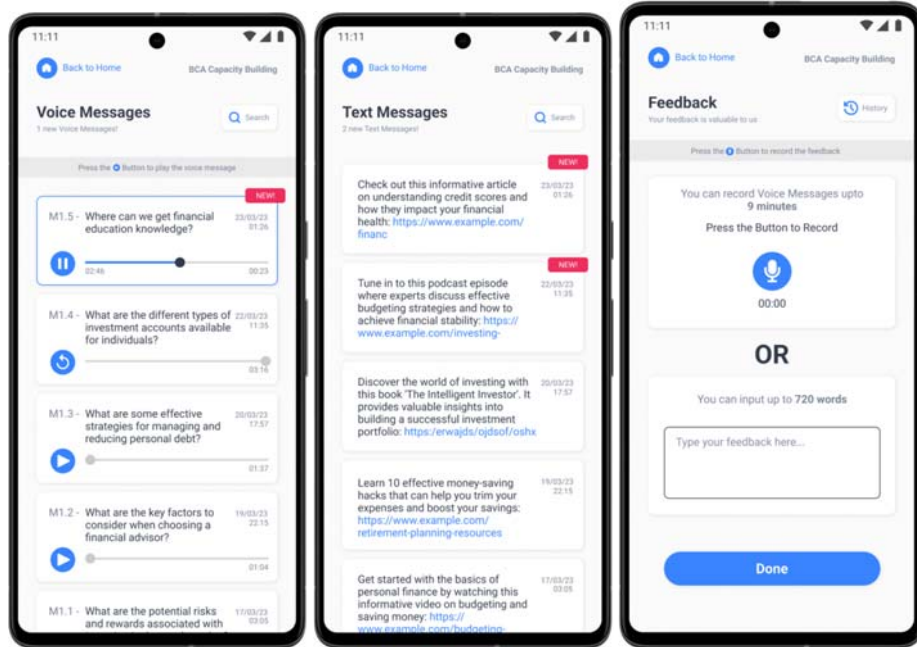


Image 10
Further navigation in video, image and pdf content.

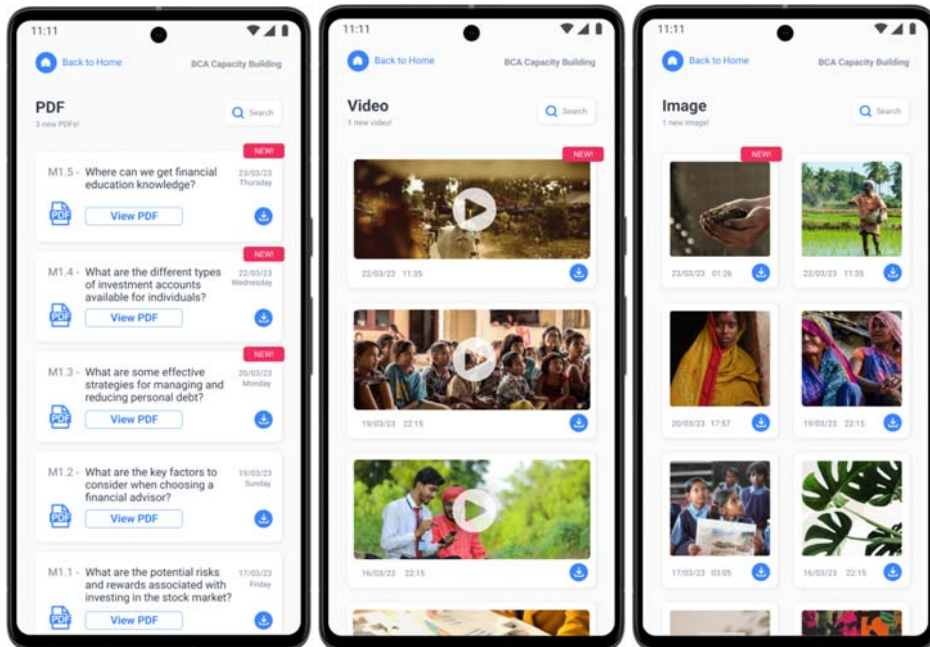


Image 11
Notice board and Events.

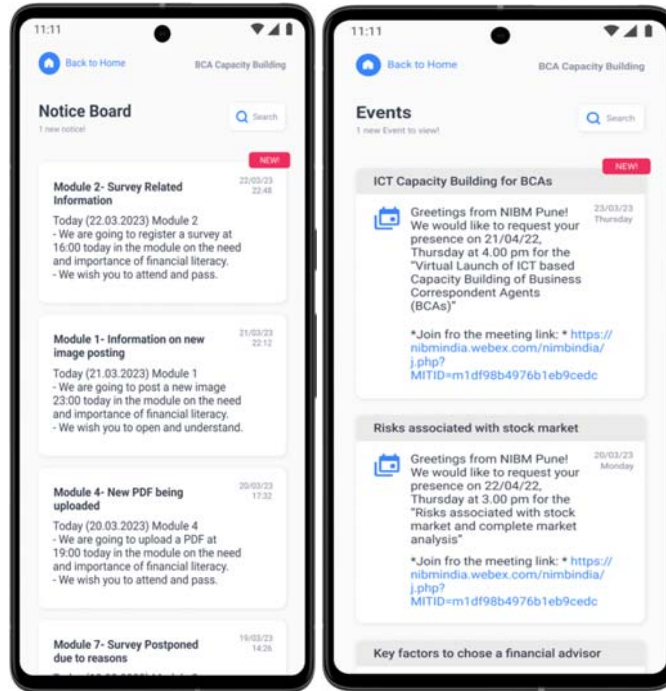


Image 12
Survey landing pages.

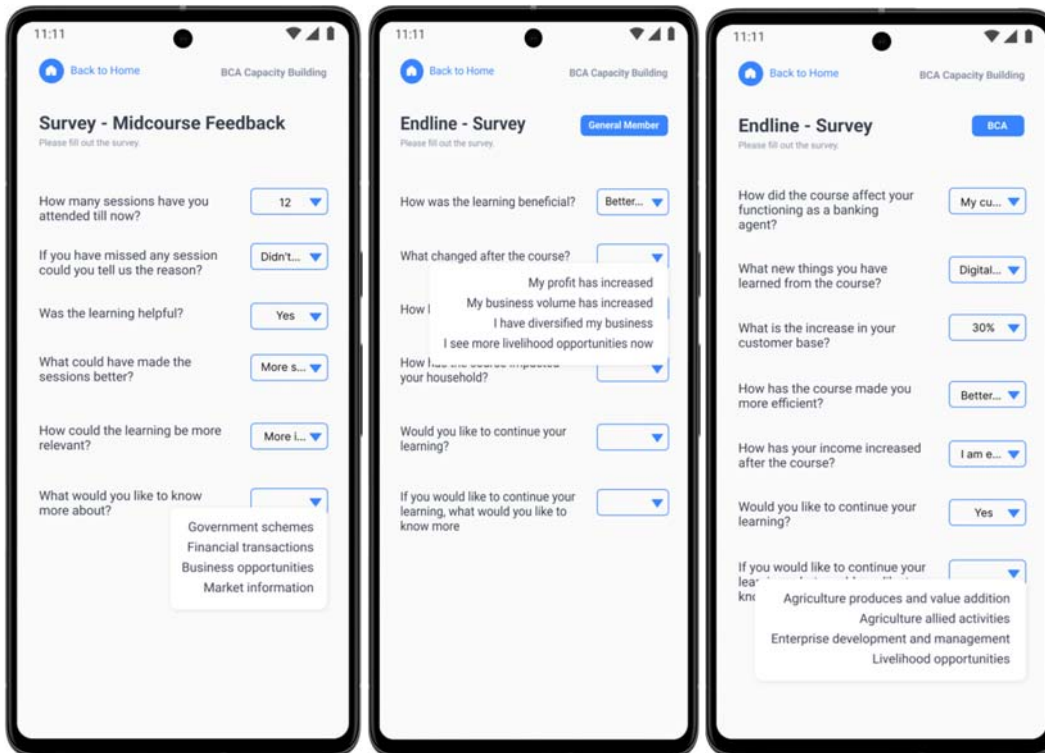


Image 13
Drop down questionnaire for survey.

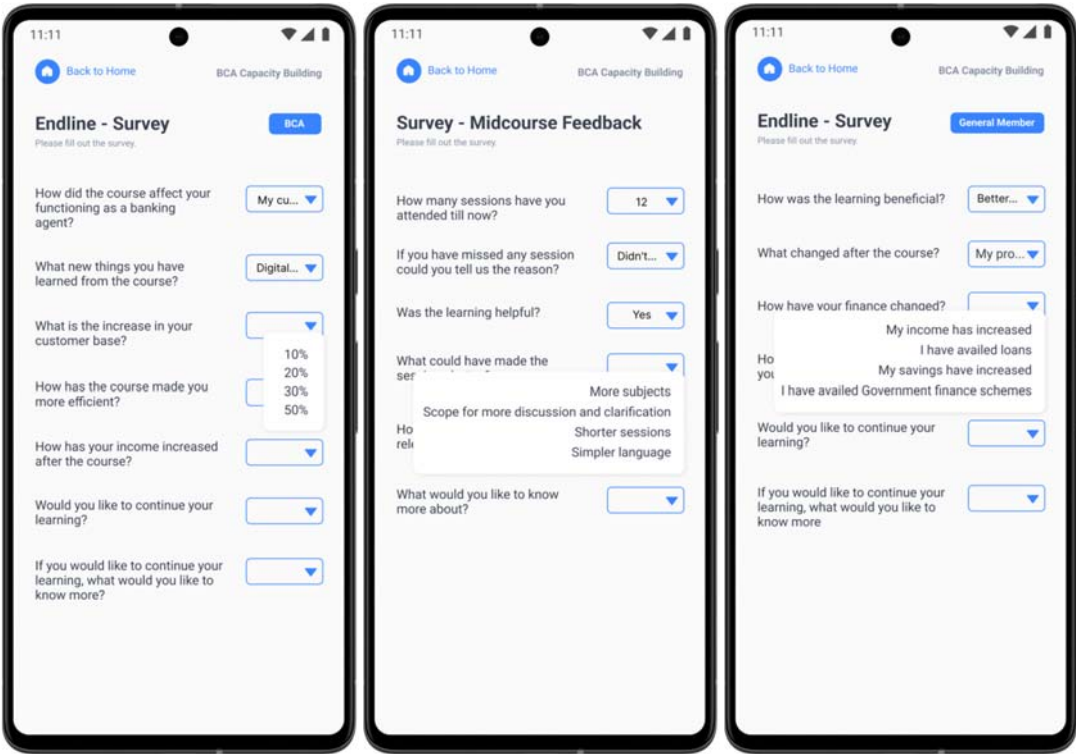


Image 14
Task flow and Navigation.

