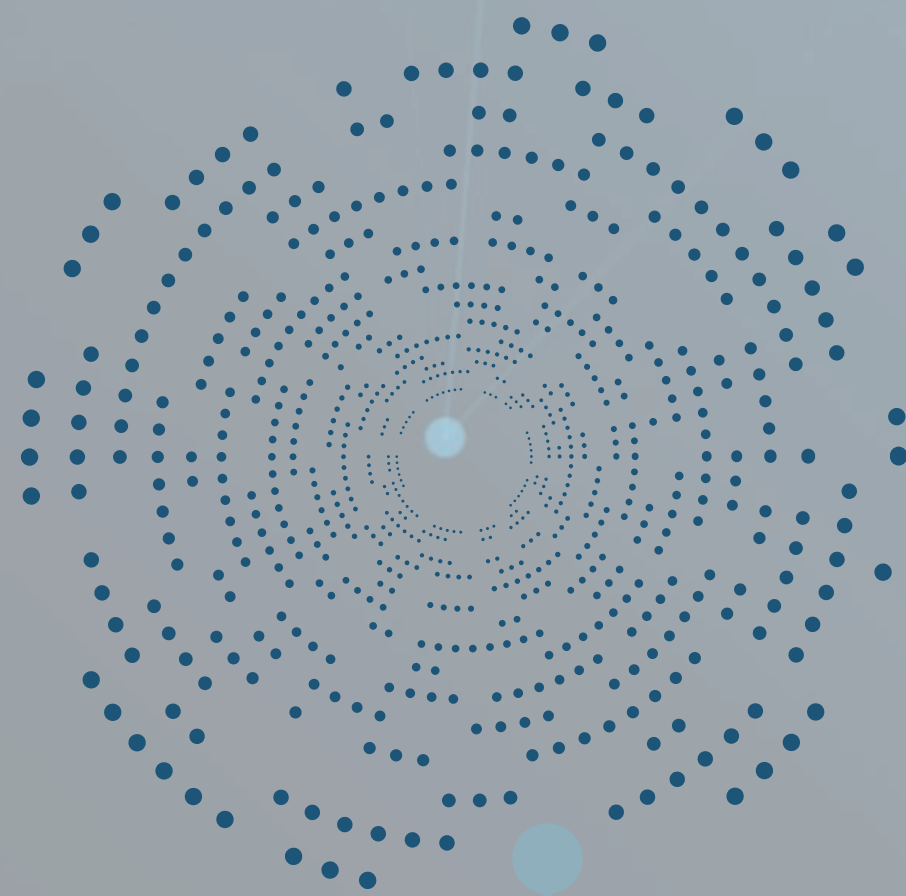


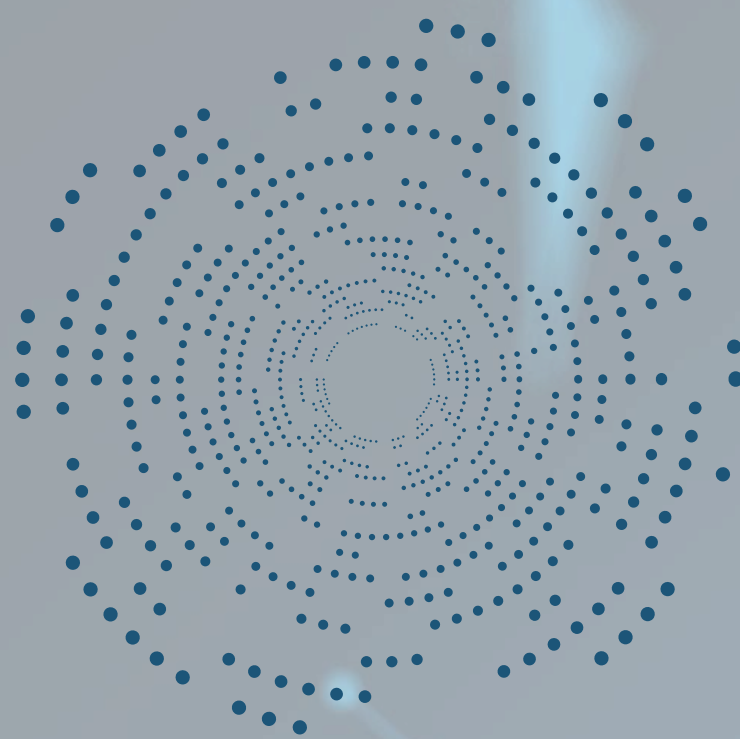


DIGITAL COMPETITION BILL 2024 AND ITS POTENTIAL IMPACT ON CONSUMERS IN INDIA



DRAFT REPORT
(VER: MAY 2024)

HOW WILL THE DIGITAL COMPETITION BILL AFFECT CONSUMERS AND THE INDIAN DIGITAL FIRMS?



The Digital Competition Bill (DCB) 2024 seeks to remedy the ills of digital markets through designating digital firms that exert significant influence on or control digital ecosystems, as systemically significant digital enterprises or SSDEs.

Such SSDEs shall be required to modify their interface with users in ways such as how they allow consumers to access their services, gather data across services, maintain transparency, third-party access to data, etc.

This report examines the extent of inclusion of Indian digital firms in the proposed SSDE criteria under the DCB. The report further examines the effect of restraints on SSDEs such as unbundling (of apps or platforms), data use restrictions, requirement to seek user consent across core digital services on consumer welfare.

ABOUT US



CUTS Institute for Regulation & Competition (CIRC) is a think-tank and capacity-building organization in the area of law and economics. The institute currently focuses on specialized thematic areas, namely: Competition Law and Policy, Digital Economy Regulation, Market/ Economic Regulation, Sustainability and Infrastructure Regulation/ PPPs, and Online Dispute Resolution (ODR).

EXECUTIVE SUMMARY

The Digital Competition Bill (DCB) 2024 seeks to remedy the ills of digital markets through designating digital firms that exert significant influence on or control digital ecosystems, as Systemically Significant Digital Enterprises or SSDEs. The DCB aims to impose new ex-ante regulations on SSDEs and Associated Digital Enterprise (ADE's) targeting their potential anti-competitive practices.

This report examines the extent of inclusion of Indian digital firms in the proposed SSDE criteria under the DCB. The report further examines the effect of restraints on SSDEs such as unbundling (of apps or platforms), data use restrictions, requirement to seek user consent across core digital services on consumer welfare.

Designated SSDEs and ADEs shall be required to modify their interface with users in ways such as how they allow consumers to access their services, gather data across services, maintain transparency, third-party access to data, etc. The impact of these regulations will inevitably extend to the user interface (UI) and user experience (UX).

1. Objective of the study: i. to examine and undertake analysis of the impact of ex-ante regulation on user interface and user experience in the Indian context.
2. Gaps in the research: This report emphasizes that consumers play a pivotal role in shaping market dynamics and driving economic growth. Their experiences and interactions with digital platforms and services are key factors in determining the success or failure of regulatory interventions. However, the current discourse on ex ante regulation in India lacks focusing on the impact on consumers. To address this critical gap, the report places consumers at the forefront of the discussion. By examining the impact of regulation on user interface, it aims to shed light on how regulatory measures can influence the overall consumer experience in the digital domain. The findings from this research will contribute to a more comprehensive understanding of the implications of regulatory decisions on user interface design, usability, and consumer satisfaction.
3. Questions raised in the study:
 - Undertake a preliminary assessment of the extent to which the threshold criteria, provided in the Digital Competition Bill 2024, will cover Indian digital firms. ii
 - How the user interface is likely to be changed on account of the modifications induced by SSDE designation?
 - Study the consumer welfare in terms of the consumer be better off or worse off on account of the modified user interface on account of the modifications induced by SSDE-designation?

4. Methodology: In order to study the impact on consumer welfare, the following steps are followed:

Objective 1: Assessment of Inclusion of Enterprises engaged in Core Digital Services as “Systematically Significant Digital Enterprises (SSDEs)”

• **Digital Competition Bill** lays down following criteria to determine any enterprise engaged in core digital services as SSDE:-

A. Enterprise meets any of the following financial thresholds in each of the immediately preceding three financial years:

i. Turnover in India not less than 4000 crores; OR

ii. Global turnover of not less than US\$ 30 billion; OR

iii. Gross merchandise value in India of not less than INR 16000 crore; OR

iv. Global market capitalisation of not less than US\$ 75 billion.

AND

B. Enterprise meets any of the following user thresholds in each of the immediately preceding three financial years:

i. The core digital service provided by the enterprise has at least 1 crore end users; OR

ii. The core digital service provided by the enterprise has at least 10,000 business users.

Based on above criteria, the list of enterprises engaged in core digital services in India were identified.

Objective 2: Assessment of impact of DCB on consumer welfare

• In order to study the impact on consumer welfare, the following steps were followed:

A. Since consumers do not fully comprehend the technical terms, restraints imposed by DCB and their consequential impact on user interface, therefore, mockups or hypothetical illustrations for four sampled firms were drawn for exhibition before the survey was conducted.

B. The four sampled companies are:

i. PayTM

ii. MakeMyTrip

iii. Jio

iv. IRCTC

C. The Mockups were focused on three principal aspects, namely:

i. unbundling (of apps or platforms)

ii. data use restrictions

iii. requirement to seek user consent across core digital services

The audience was then administered a focused group discussion through a structured questionnaire. A total of 190 users were covered in four separate groups. The audience was mainly university students and professors/ employees.

5. Findings

Part 1: Indian companies that are likely to meet the threshold criteria prescribed under DCB 2024

Table 1: Indian companies that are likely to meet the threshold criteria prescribed under DCB 2024

S No.	Company Name	Core Digital Service
1.	Hotstar	Online video streaming
2.	Zomato	Online food delivery
3.	Swiggy	Online food delivery
4.	MakeMyTrip	Online travel booking
5.	Flipkart	E-commerce platform
6.	Meesho	E-commerce platform
7.	Myntra	E-commerce platform
8.	Ajio	E-commerce platform
9.	Pharomeasy	E-commerce platform
10.	Paytm	Digital payments & Financial services
11.	Nykaa	E-commerce platform
12.	IRCTC	Railway-ticketing platform
13.	JioSaavn	Music Streaming platform

(Source: CIRC assessment based on publicly available data)

Part 2: Impact on product design and user experience.

-The SSDE designation is expected to bring in changes in the product architecture, hence various services currently available in one single app may need to be accessed individually.

-Data use restrictions may compromise the seamlessness of consumers. Thus, it may enhance the effort and time while using the digital services

-User consent requirements may increase the time and effort on the part of consumers without yielding commensurate benefits in privacy and consumer welfare.

Part 3: DCB and Consumer Welfare

Survey results: The result of the survey is presented through a graphical representation displaying the opinion of digital users on the modified user interface on account of the modifications induced by SSDE-designation

1. Respondent profile

- **More than 70% of respondents were below the age of 30. Most of them were students (88%) while rest were employees.**

2. Frequency of Usage of Digital Platforms:

- **For 70% of the respondents, the use time was about 2 hours on daily basis.**

3. Frequency of Pop-up requests seeking consent for data usage:

- **59% respondents received requests frequently while 39% received requests occasionally or rarely.**

4. Views on giving consent for data usage on a regular basis for personalised services:

- **60% of the respondents feel the inconvenience while giving consent on a regular basis.**
- **Increasing the consent frequency further is likely to render consumers worse off.**

5. Views on the current level of personal information requirement for using apps:

- **38% of respondents feel that the current level is quite high and burdensome; while 33% of the respondents feel that the current level is appropriate for the services that they get to use from the apps.**
- **Restrictions imposed upon SSDE may require increased authentication requirements. Such requirements may in turn increase the effort and time taken to use digital products/ services.**

6. Views on the situation where users have to manually insert information each time they want to use an app:

- **This situation is burdensome for 50% of the respondents while a smaller proportion of 25% of the respondents were of the opinion that this will safeguard their personal information.**

7. Experience with single sign-on feature:

- **81% respondents felt that this feature simplifies the user experience.**

8. Views in case if single sign-on feature is removed:

- **74% of respondents would feel burdensome if single sign-on feature is removed.**

9. Views on personalised ads enhancing their user experience:

- **55% respondents feel enhancement of their user experience while 39% do not feel so.**
- **Data use restriction will limit personalized recommendations, therefore, it is likely to impact consumers adversely.**

10. Views on bundled offerings in terms of providing value and convenience to consumers:

- **For 50% of the respondents, bundled offering are convenient while bundled offering has no impact on 14% of the respondents.**

11. Change in user's experience if the range of services previously bundled together is now provided separately:

- **60% respondents feel that their experience will get disrupted and it would make it more time consuming.**
- **Reduction in bundled offering is perceived by consumers as a lowering of choices and a decrease in value for money.**

Comments and feedback

Kindly provide your comments and feedback to: nas@circ.in

ACKNOWLEDGEMENTS

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CONTEXT:

- The Fifty-third Report of the Parliamentary Standing Committee on Finance ('PSC Report') on the subject "Anticompetitive Practices by Big Tech Companies" has recommended the implementation of ex-ante regulation for digital markets in India.
- In February 2023, the Ministry of Corporate Affairs ('MCA') established the Committee on Digital Competition Law ('CDCL').
- The CDCL released a Report on 27th February 2024 that examined the need for an ex-ante regulatory mechanism for digital markets in India along with the Draft Digital Competition Bill, 2024.
- This CDCL report investigates the effects of designating a significant player as a "Systematically Significant Digital Enterprise (SSDE) on consumer interface, considering the dynamic nature of digital markets.
- The digital era has witnessed the emergence of dominant players known as "SSDE," who wield significant influence over various aspects of digital services. Concerns regarding fair competition, data privacy, and consumer choice have prompted regulatory bodies to take action and enforce antitrust laws more vigorously.

- Privacy regulations like the General Data Protection Regulation (“GDPR”) have had a profound impact on the digital user interface and experience in recent years. One notable change is the widespread use of cookie consent banners on websites. The GDPR mandates that users have a clear and free choice to accept or reject cookies, fundamentally altering how users interact with websites.
- However, this shift towards increased transparency and user control over personal data has drawbacks. Many users find the constant stream of consent requests inconvenient, which has somewhat affected the seamless digital experience they were accustomed to. Additionally, some websites limit or block access to their content unless cookies are accepted, raising accessibility concerns and potentially conflicting with the spirit of the GDPR's consent requirements.
- The introduction of the Digital Competition Bill, 2024 (DCB) is expected to bring further changes to the digital landscape. The DCB aims to impose new ex-ante regulations on SSDEs and , specifically Associated Digital Enterprise (ADE’s) targeting their potential anti-competitive practices. The impact of these regulations will inevitably extend to the user interface (UI) and user experience (UX).
- The primary objective of the study is to examine and highlight these potential changes and their implications on user interface and user experience. Through the analysis, the report aims to provide a hypothetical graphical understanding of the scenarios before and after the implementation of the DCB.

DATA PRIVACY, EX-ANTE REGULATION WHAT HAVE WE LEARNED FROM RECENT EXPERIENCES?

1. Mehrnaz Ataei, Auriol Degbelo and Christian Kray in their work ‘Privacy theory in practice: designing a user interface for managing location privacy on mobile devices’ discussed about rights of users regarding their location privacy in the context of the General Data Protection Regulation – GDPR). This work addresses three key issues: whom to share location with, when to share it, and where to share it. Results of a user study indicate that (1) the proposed interface led to a greater sense of control, that (2) it was usable and well received, and that (3) participants were keen on using it in real life. The findings can inform the development of interfaces to manage location privacy.
2. Fawaz, Feng, and Shin in their work ‘Anatomization and Protection of Mobile Apps’ Location Privacy Threats’ (2015) put it: ‘the user either enjoys full privacy with no utility, or total utility with no privacy’.
3. Limba, Tadas; Driaunys, Kestutis; Kiskis, Mindaugas; Sidlauskas, Aurimas in their work ‘Development of Digital Contents: Privacy Policy Model Under the General Data Protection Regulation and User-Friendly Interface’. (Transformations in Business & Economics, 2020, Vol 19, Issue 1, p133) discussed that organizations' privacy policies do not comply with GDPR requirements and recommendations of a user-friendly interface. The article developed a theoretical privacy policy model under the GDPR, along with a user-friendly interface, the application which could enable organizations to provide relevant content in their privacy policies, ensure consumer rights and encourage greater dissemination of information. This novel theoretical privacy policy model would enable organizational privacy policies to become more user-friendly, more readable and easier to understand.

4. A joint position paper by the Information Commissioner's Office and the Competition and Markets Authority on the topic 'Harmful design in digital markets: How Online Choice Architecture (OCA) practices can undermine consumer choice and control over personal information' raises concerns that Online interfaces and design choices are a fundamental touchpoint between firms and users who participate in digital markets.

5. George Chalhoub And Ivan Flechais in their work 'Data Protection at a Discount: Investigating the UX of Data Protection from User, Designer, and Business Leader Perspectives' (University of Oxford, United Kingdom) explored data protection shortcomings for users, UX. This work studied smart home users' designers and business leaders, exploring how they experience data protection interactions, regulation, and processes. The findings confirm that users have poor data protection interactions (e.g., consent and data access requests). It was also found that business leaders and designers experience difficulties in identifying, applying, and tailoring suitable processes and practices for data protection for which some have developed "discount data protection": shortcuts, heuristics, and common-sense practices to overcome these challenges

RATIONALE FOR CONDUCTING THIS RESEARCH

- The research study seeks to contribute significantly to the discourse surrounding “Ex ante regulation of digital firms in India” by addressing the lack of attention given to the crucial “consumer perspective.” Through this study, the primary objective is to foster comprehensive discussions and in-depth analysis of the impact of ex-ante regulation on user interface and user experience within the Indian context.
- Recognizing the importance of considering the consumer perspective in regulatory discussions, this study emphasizes that consumers play a pivotal role in shaping market dynamics and driving economic growth. Their experiences and interactions with digital platforms and services are key factors in determining the success or failure of regulatory interventions. However, the current discourse on ex ante regulation in India lacks focusing on the impact on consumers.
- To address this critical gap, the research study places consumers at the forefront of the discussion. By examining the impact of regulation on user interface, it aims to shed light on how regulatory measures can influence the overall consumer experience in the digital domain. The findings from this research will contribute to a more comprehensive understanding of the implications of regulatory decisions on user interface design, usability, and consumer satisfaction.

OBJECTIVES OF THE STUDY:

- Undertake a preliminary assessment of the extent to which the threshold criteria, provided in the Digital Competition Bill 2024, will cover Indian digital firms
- Simulate and illustrate how the user interface is likely to be changed on account of the modifications induced by SSDE-designation?
- Study the consumer welfare in terms of the consumer be better off or worse off on account of the modified user interface on account of the modifications induced by SSDE-designation?

Methodology on assessment of impact of Digital Competition Bill on Consumer Welfare

1. Assessment of Inclusion of Enterprises engaged in Core Digital Services as “Systematically Significant Digital Enterprises (SSDEs)”

• Digital Competition Bill lays down following criteria to determine any enterprise engaged in core digital services as SSDE:-

A. Enterprise meets any of the following financial thresholds in each of the immediately preceding three financial years:

- i. Turnover in India not less than 4000 crores; OR
- ii. Global turnover of not less than US\$ 30 billion; OR
- iii. Gross merchandise value in India of not less than INR 16000 crore; OR
- iv. Global market capitalisation of not less than US\$ 75 billion.

AND

B. Enterprise meets any of the following user thresholds in each of the immediately preceding three financial years:

- i. The core digital service provided by the enterprise has at least 1 crore end users; OR
 - ii. The core digital service provided by the enterprise has at least 10,000 business users.
- The above criteria was matched against the publicly available relevant data to draw a list of enterprises against various core digital services in India.

Methodology on assessment of impact of Digital Competition Bill on Consumer Welfare

2. Assessment of impact of DCB on consumer welfare

- In order to study the impact on consumer welfare, the following steps were followed:

a. Since consumers do not fully comprehend the technical terms, restraints imposed by DCB and their consequential impact on user interface, therefore, mockups or hypothetical illustrations for four sampled firms were drawn for exhibition before the survey was conducted.

b. The four sampled companies are:

- i. PayTM
- ii. MakeMyTrip
- iii. Jio
- iv. IRCTC

c. The Mockups were focused on three principal aspects, namely:

- i. unbundling (of apps or platforms)
- ii. data use restrictions
- iii. requirement to seek user consent across core digital services

d. The audience was then administered a focused group discussion through a structured questionnaire. A total of 190 users were covered in four separate groups.

• The audience was mainly university students and professors/ employees.

IDENTIFIED PARAMETERS FOR THIS RESEARCH:

i. Bundling and tying:

"Bundling and Tying" refers to the practices in which a provider combines multiple products or services into a single package (bundling) or makes the purchase of one product or service dependent on the purchase of another (tying).

ii. Data usage:

a. Consent Pop-Ups & Interstitial Pop-Ups:

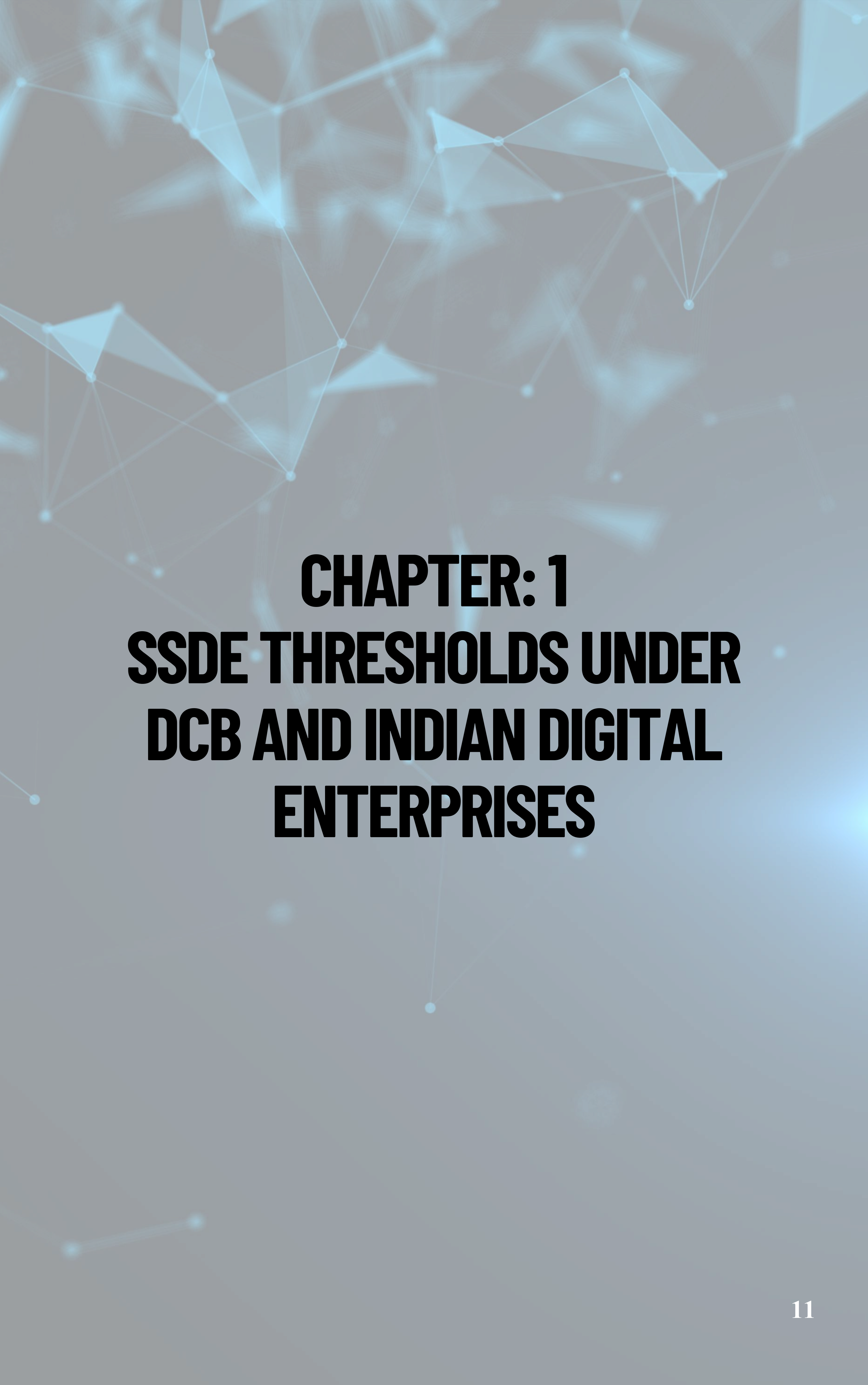
Consent pop-ups are prompts that appear on websites or apps requesting users to agree to certain terms, often related to privacy policies, data collection practices, or use of cookies.

Interstitial pop-ups are full-screen advertisements that cover the interface of an app or website, usually appearing at transition points during the user's interaction with the content.

b. Single Sign-On: "Single Sign-On" (SSO) is a user authentication service that permits a user to use one set of login credentials (e.g., username and password) to access multiple applications. The service authenticates the user for all the applications they have been given rights to and eliminates further prompts when they switch applications during the same session.

LIMITATIONS

There are several key limitations to this study. First, The Indian enterprises mentioned in the study that are meeting the SSDE financial and user threshold criteria is selected on the basis of publicly available documents. The information of group entities directly or indirectly involved in providing the same Core Digital Services are not measured in selecting the enterprises. Second, the simulations or mock-ups representing the pre-DCB and post-DCB scenarios do not reflect the real picture of the choices SSDE would opt. The mock-ups were created for the respondents to understand the nuances of the Bill.



CHAPTER: 1
SSDE THRESHOLDS UNDER
DCB AND INDIAN DIGITAL
ENTERPRISES

TABLE 1: SELECT INDIAN DIGITAL ENTERPRISES AND PROPOSED SSDE THRESHOLDS UNDER DCB

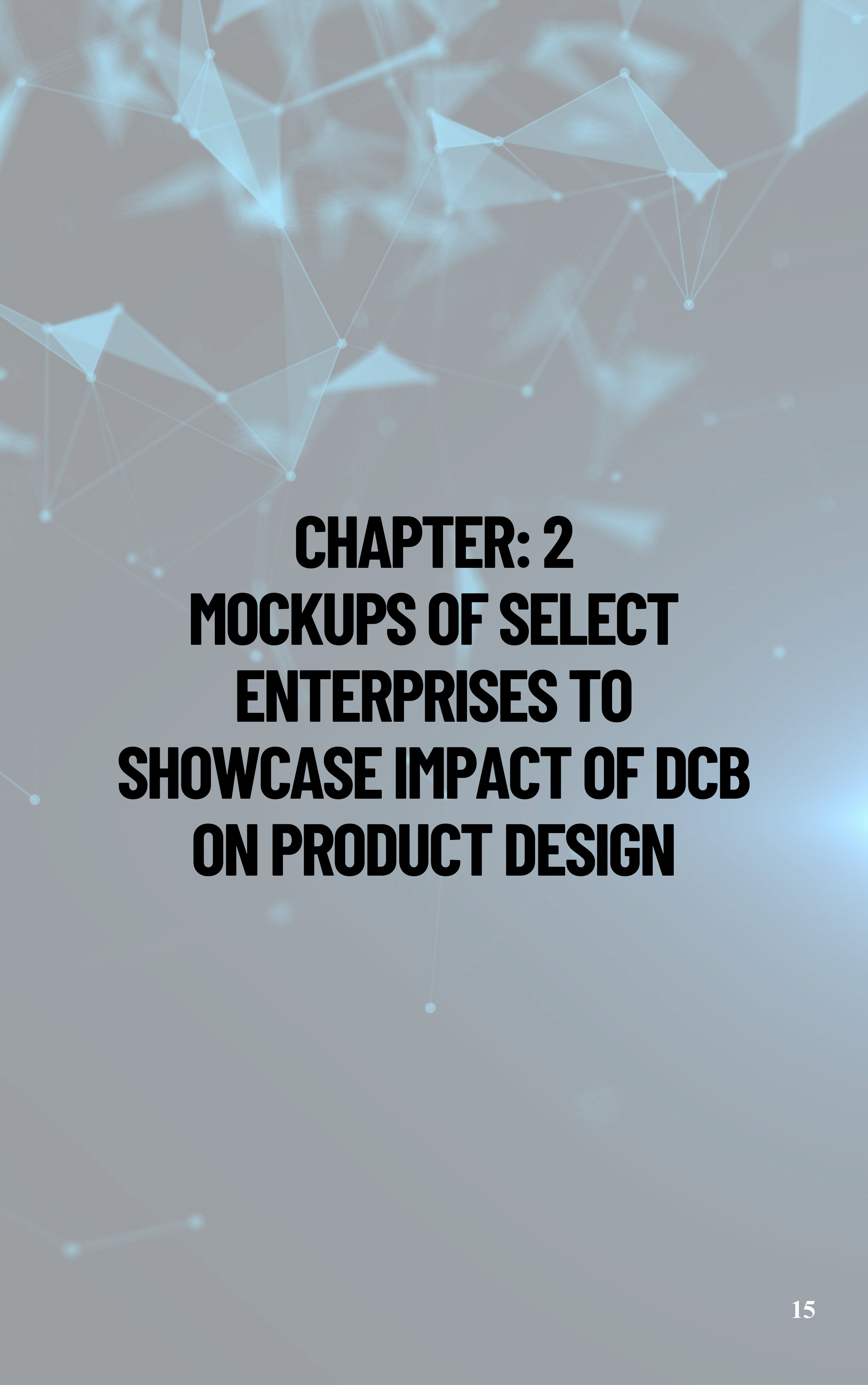
Particular	Number of Enterprise
Number of enterprise meeting SSDE criteria	13
Number of enterprise not meeting SSDE criteria	10
Total	23

**TABLE 2: SAMPLE OF ENTERPRISES AND THEIR CLASSIFICATION
BASED ON THE NATURE OF DIGITAL SERVICE**

Nature of core digital service	Number of enterprises sampled	Number of enterprises meeting SSDE criteria
Online video streaming	2	1
Online food delivery	2	2
Online travel booking/ticketing platform	2	2
e-commerce platform	7	6
Quick-commerce platform	2	0
Digital payments & Financial services	1	1
Ride-hailing platform	1	0
Ticketing aggregator	1	0
Online matrimonial service	1	0
Car-search platform	1	0
music streaming platform	1	1
Job Search Platform	1	0
Internet of Things (IoT)	1	0
Total	23	13

TABLE : LIST OF SAMPLED ENTERPRISES

Company	Core digital service	Meeting/Not-meeting SSDE criteria
Hotstar	Online video streaming	Meeting
MX Player	Online video streaming	Not meeting
Zomato	online food delivery	Meeting
Swiggy	online food delivery	Meeting
MakemyTrip	Online travel booking	Meeting
Flipkart	e-commerce platform	Meeting
Meesho	e-commerce platform	Meeting
Myntra	e-commerce platform	Meeting
Ajio	e-commerce platform	Meeting
Pharmeasy	e-commerce platform	Meeting
Paytm	Digital payments & Financial services	Meeting
Ola (ANI Technologies)	Ride-hailing platform	Not meeting
BookmyShow	Ticketing aggregator	Not meeting
Bharat Matrimony	Online matrimonial service	Not meeting
Zepto	Quick-commerce platform	Not meeting
Blinkit	Quick-commerce platform	Not meeting
Nykaa	e-commerce platform	Meeting
CarDekho	Car-search platform	Not meeting
Snapdeal	e-commerce platform	Not meeting
Jio Saavn	music streaming platform	Meeting
Info Edge (Naukri.com)	Job Search Platform	Not meeting
MapMyIndia	IoT	Not meeting
IRCTC	Railway-ticketing platform	Meeting



CHAPTER: 2
MOCKUPS OF SELECT
ENTERPRISES TO
SHOWCASE IMPACT OF DCB
ON PRODUCT DESIGN

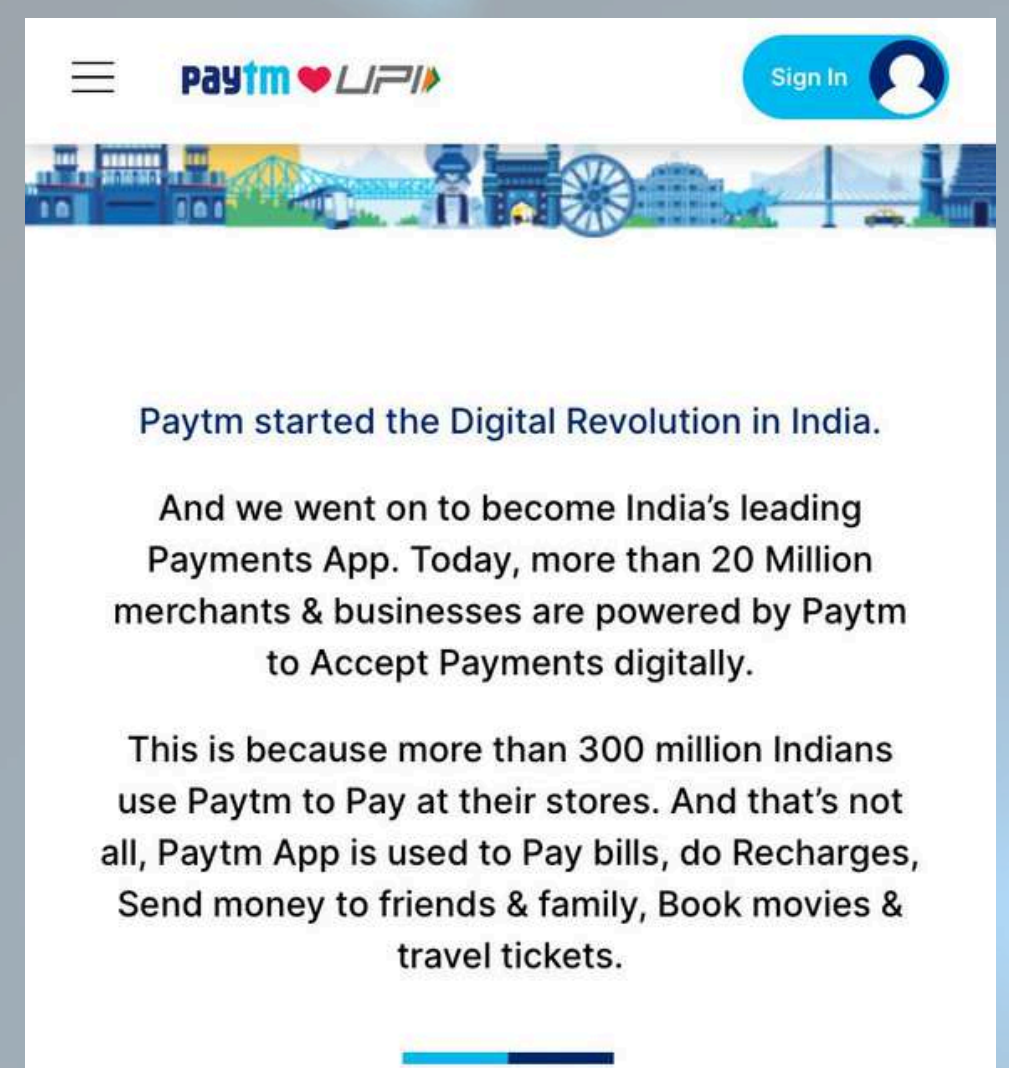


paytm

Paytm, which stands for "Pay Through Mobile," is a prominent financial technology company that originated in India. Paytm has made significant advancements in the field of digital payments and financial services within the country. The company's offerings include a wide range of services, such as mobile payment services for consumers, QR code and point of sale solutions for merchants, online payment gateway solutions, microloans, 'buy now, pay later' options, mobile recharge, mutual fund investments, and facilitating small personal loans in collaboration with financial institutions. Paytm has garnered over 100 million downloads on Google Play store and Apple Store combined, showcasing its widespread popularity and reach.

Paytm has an annual turnover of 8400 crores rupees.

(Source https://paytm.com/document/ir/annual-reports/Paytm_Annual_Report_2023.pdf.)



Source:

<https://paytm.com/about-us>



paytm

APPLICATION OF **SSDE
STATUS ON PAYTM**



paytm

INTERSTITIAL POP-UPS & CONSENT POP-UPS

PARAMETER: INTERSTITIAL POP-UPS & CONSENT POP-UPS

To understand the impact of the DCB on user experience, assumptions are made for an illustrative example. In the assumed scenario, a user regularly utilizes the PayTM app for various services without encountering consent pop-ups, resulting in a smooth and uninterrupted user journey. This assumption establishes the basis for the pre-DCB user experience.

An interstitial pop-up is a full screen advertisement whereas a consent popup may occupy part of the screen to seek consent of the user.

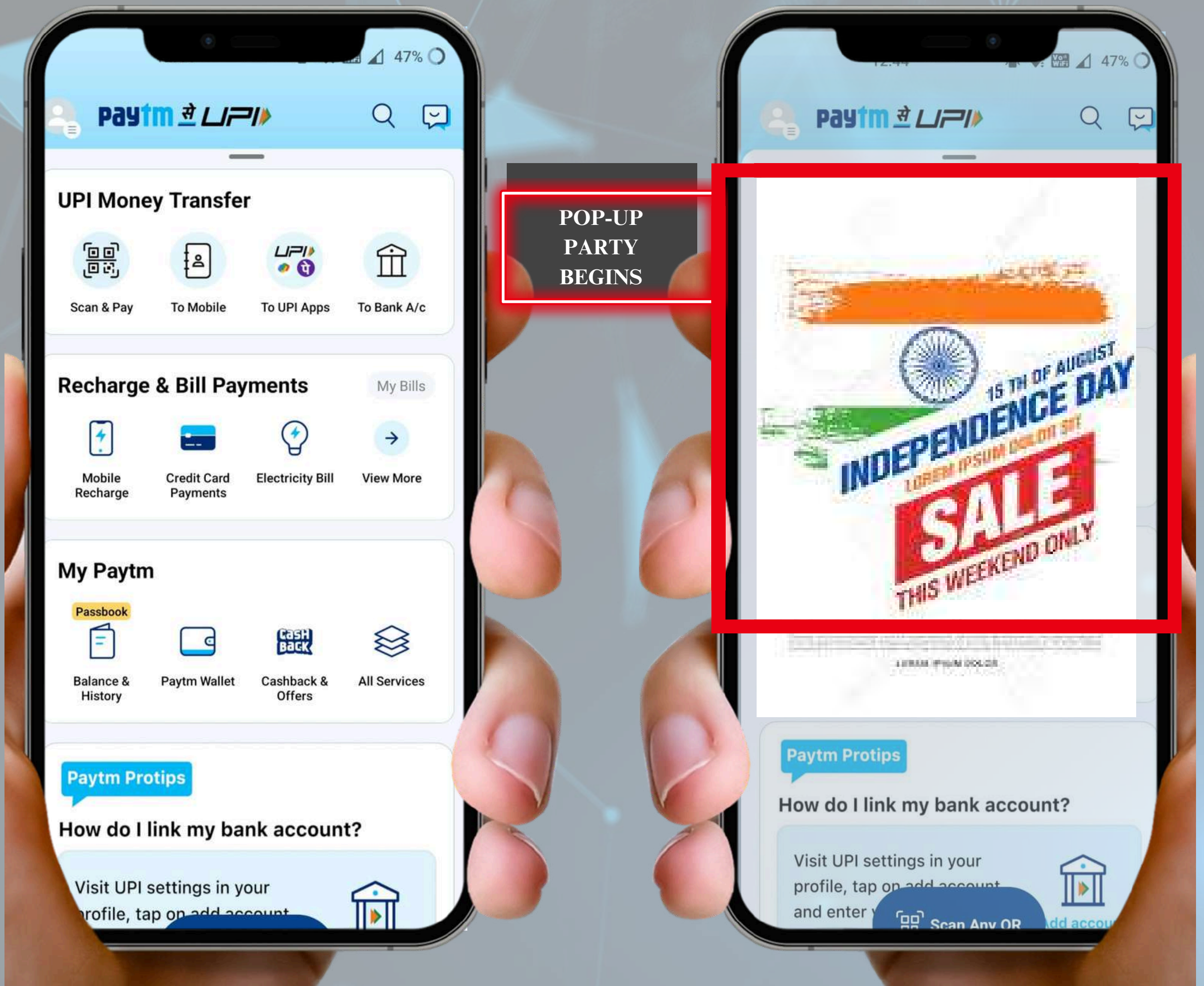
In the post-DCB environment, a significant shift is expected in how the app interacts with its users. In accordance with the DCB, an SSDE cannot without the consent of the end user or business user intermix or cross use their personal data collected from different services including its Core Digital Service; or permit usage of such data by any third party. (Article 12 (2) of DCB) Therefore, the assumption is that the user is now presented with a pop-up, referred to as a 'Pop-Up Party', requesting their consent for data usage even before accessing the home page. This may lead to consent fatigue.

These assumptions facilitate a comparative analysis of the pre and post-DCB scenarios, highlighting the potential changes in user experience.

INTERSTITIAL POP-UPS

PRE DCB

POST DCB



Consent pop-ups are prompts that appear on websites or apps requesting users to agree to certain terms, often related to privacy policies, data collection practices, or use of cookies.

Interstitial pop-ups are full-screen advertisements that cover the interface of an app or website, usually appearing at transition points during the user's interaction with the content. (Consider a situation where you're using a social media app). Post-DCB, every time the app wants to access a new type of data or use your data in a new way, it would need to ask for your explicit consent. This could result in frequent interruptions while you're scrolling through your feed or watching videos, as consent pop-ups appear on your screen.

PRE DCB:

Before the implementation of the DCB, users experienced a seamless journey when accessing apps such as PayTM. Upon opening the PayTM app, users were directly directed to the home page, without any interruptions in the form of consent pop-ups.

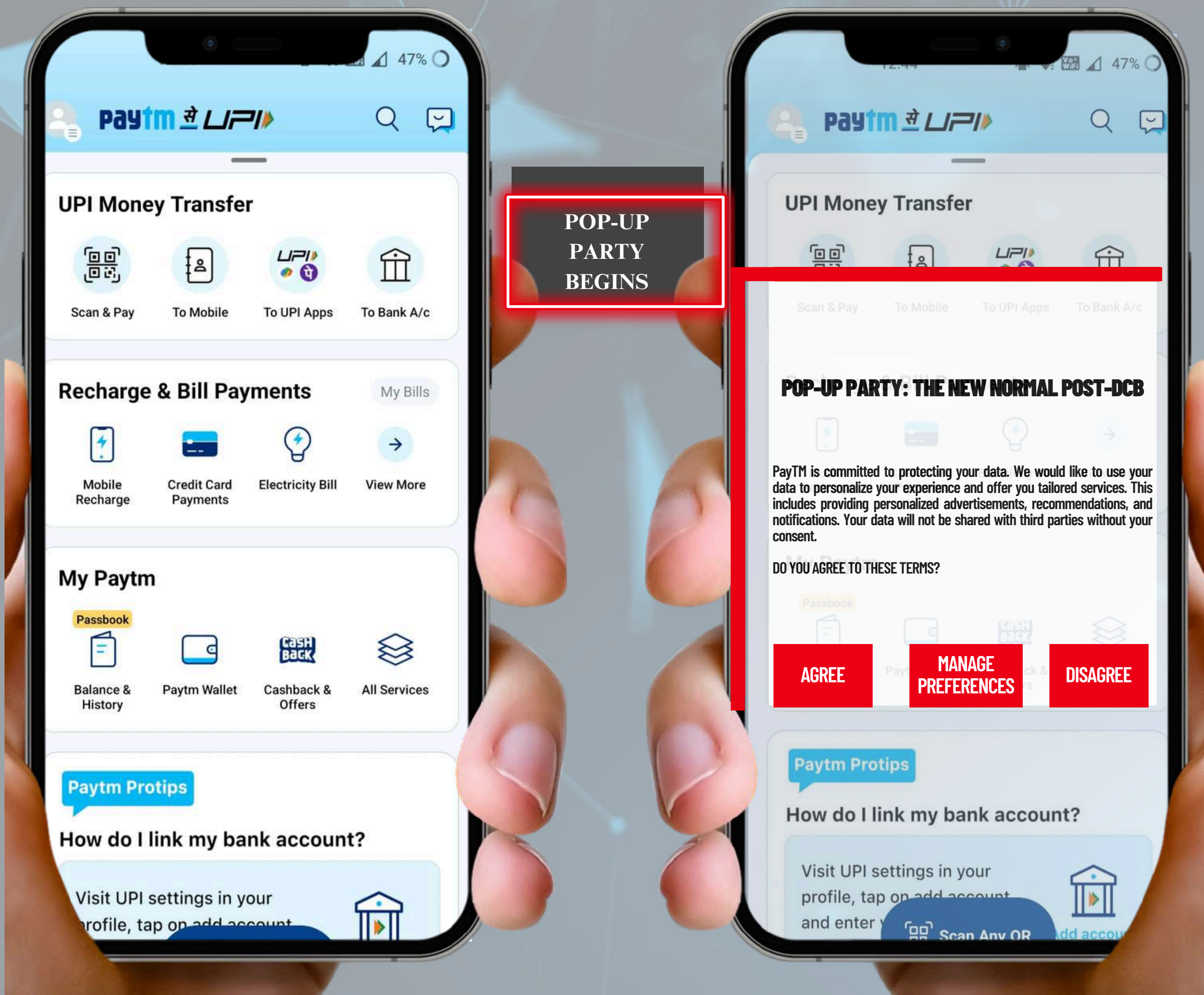
POST DCB:

With the implementation of the DCB, a notable transformation occurs in the app's interface. Upon opening the PayTM app, users are now greeted with a pop-up notification, labeled as a "Pop-Up Party." This notification seeks the users' consent for PayTM to personalize their experience, provide customized services, and utilize their data for various purposes. However, the increased frequency and volume of these pop-ups may lead to consent fatigue, and would take longer time to operate the application, potentially affecting the overall user experience in a negative manner.

CONSENT POP-UPS

PRE DCB

POST DCB



Consent pop-ups are prompts that appear on websites or apps requesting users to agree to certain terms, often related to privacy policies, data collection practices, or use of cookies.

Interstitial pop-ups are full-screen advertisements that cover the interface of an app or website, usually appearing at transition points during the user's interaction with the content. (Consider a situation where you're using a social media app. Post-DCB, every time the app wants to access a new type of data or use your data in a new way, it would need to ask for your explicit consent (Article 12 of the DCB). This could result in frequent interruptions while you're scrolling through your feed or watching videos, as consent pop-ups appear on your screen.

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Before the implementation of the DCB, users experienced a seamless journey when accessing apps such as PayTM. Upon opening the PayTM app, users were directly directed to the home page, without any interruptions in the form of consent pop-ups.

POST DCB:

With the implementation of the DCB, a notable transformation occurs in the app's interface. Upon opening the PayTM app, users are now greeted with a pop-up notification, labeled as a "Pop-Up Party." This notification seeks the users' consent for PayTM to personalize their experience, provide customized services, and utilize their data for various purposes. However, the increased frequency and volume of these pop-ups may lead to consent fatigue, potentially affecting the overall user experience in a negative manner.



paytm

**INCREASED USER AUTHENTICATION
AND MANUAL INPUT REQUIREMENTS**

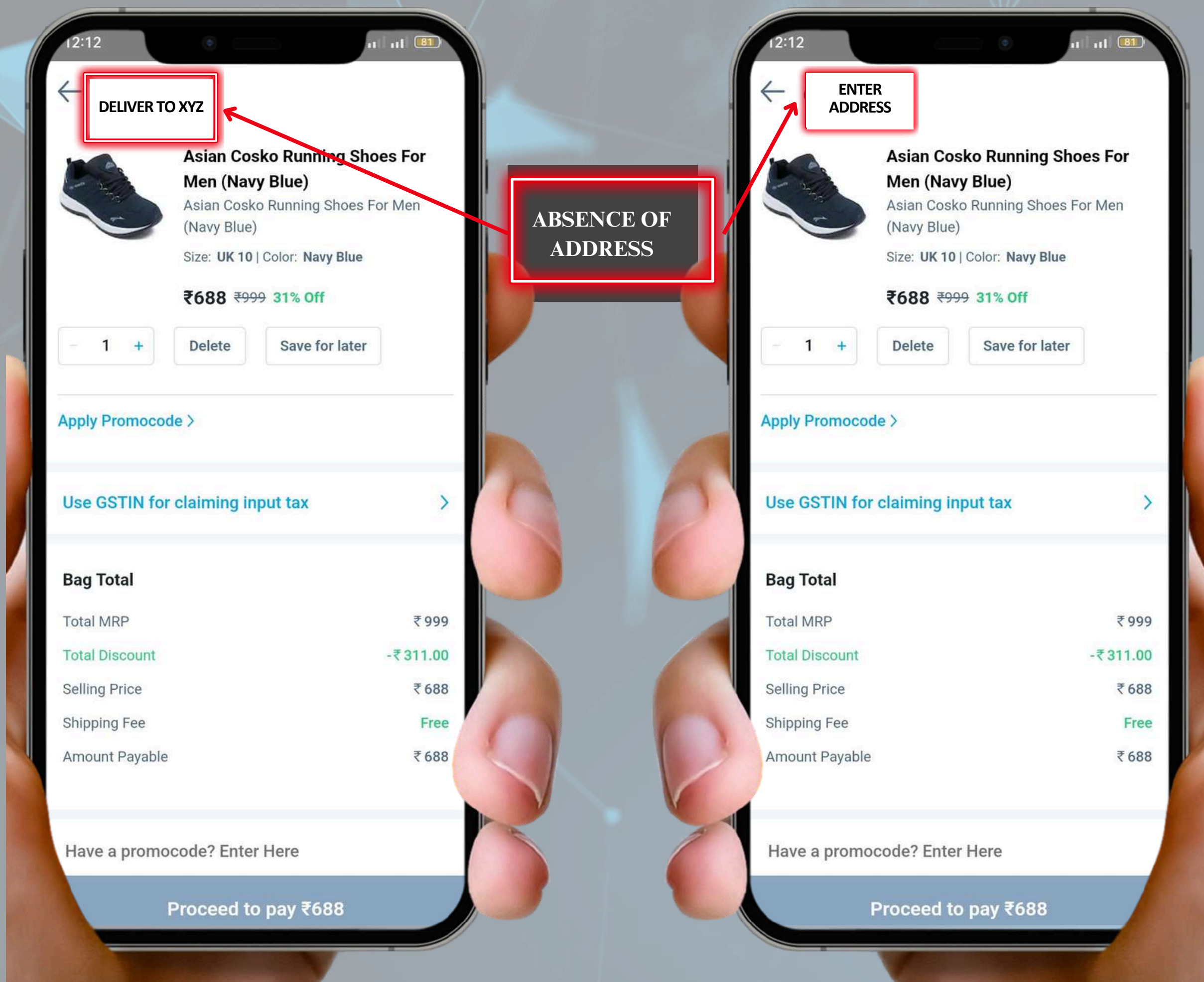
PARAMETER: INCREASED USER AUTHENTICATION AND MANUAL INPUT REQUIREMENTS

In the context of PayTM, users often make purchases that require delivery to a specific location. Prior to the implementation of the DCB, the app would store and use the user's address information to automatically fill in the required fields in subsequent transactions, streamlining the purchase process and saving time and effort. However, in the post-DCB period, due to restrictions on data usage, the app may no longer be able to automatically populate this information. As a result, users are now required to manually input their address for each transaction. This scenario illustrates the potential impact of the DCB on "Increased User Authentication and Manual Input Requirements."

INCREASED USER AUTHENTICATION AND MANUAL INPUT REQUIREMENTS

PRE DCB

POST DCB



"Increased User Authentication and Manual Input Requirements" refers to potential additional steps a user may need to undertake for verification and data input in digital services. This could entail a more frequent need to manually enter or re-enter information that was previously auto-filled, or to go through additional authentication steps for security reasons.

Pre-DCB:

Before the implementation of the DCB, the data of users on PayTM was utilized to enhance their shopping experience by providing personalized and efficient services. One of these conveniences included an automatic address-fill feature. This feature utilized stored data to automatically fill in the user's address during the checkout process, eliminating the need for repetitive manual input and saving valuable time for the user.

Post DCB:

With the implementation of DCB, there are potential alterations in how platforms handle consumer data. A SSDE have to mandatorily obtain consent from end users or business users to intermix or cross use their personal data, (Article 12(2) of the DCB). The example of such a change could be the introduction of a manual input requirement for delivery addresses during each purchase. This adjustment may lead to additional steps and necessitate manual data entry, potentially affecting the convenience and efficiency of the user's shopping experience on the platform.



paytm

BUNDLING AND TYING

PARAMETER: BUNDLING AND TYING

Digital economy players, particularly those which run ecosystems, may have two kinds of relationships between the ecosystem and various services/ products, namely: vertical (i.e. a marketplace selling vertically related products) and horizontal (i.e. an ecosystem offering unrelated services or products).

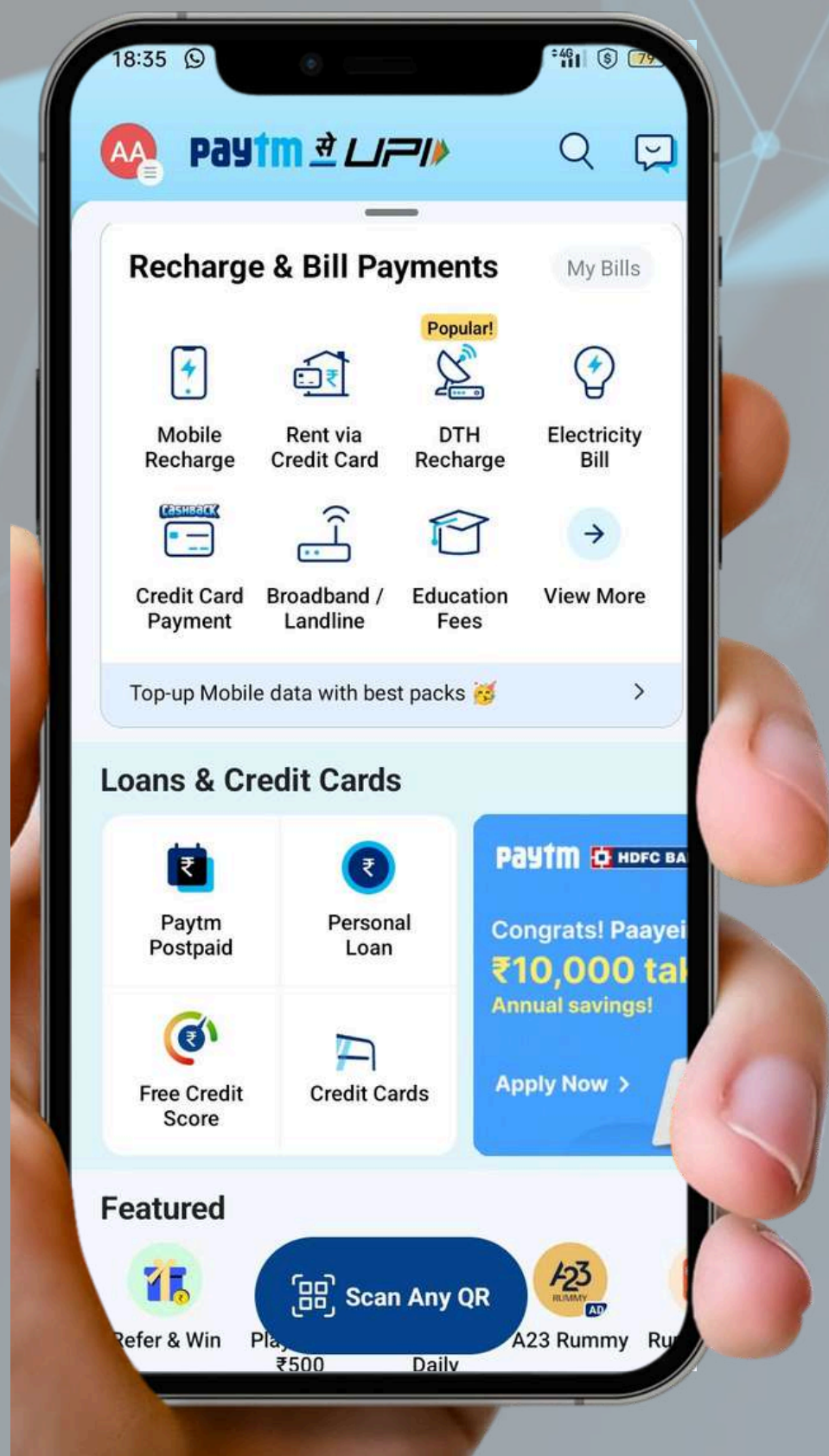
In the first case, a more appropriate term may be bundling and tying whereas in the later, a single sign-on may lead to combined use of two products by a user.

For the purpose of this analysis, it is assumed that the regulations mandated by the DCB will require platforms like Paytm to separate or "unbundle" their services. This means that the ability to provide multiple interconnected services within a single application will be restricted. As a result, it is also assumed that this unbundling may have potential implications for the convenience and smooth user experience that Paytm users currently enjoy.

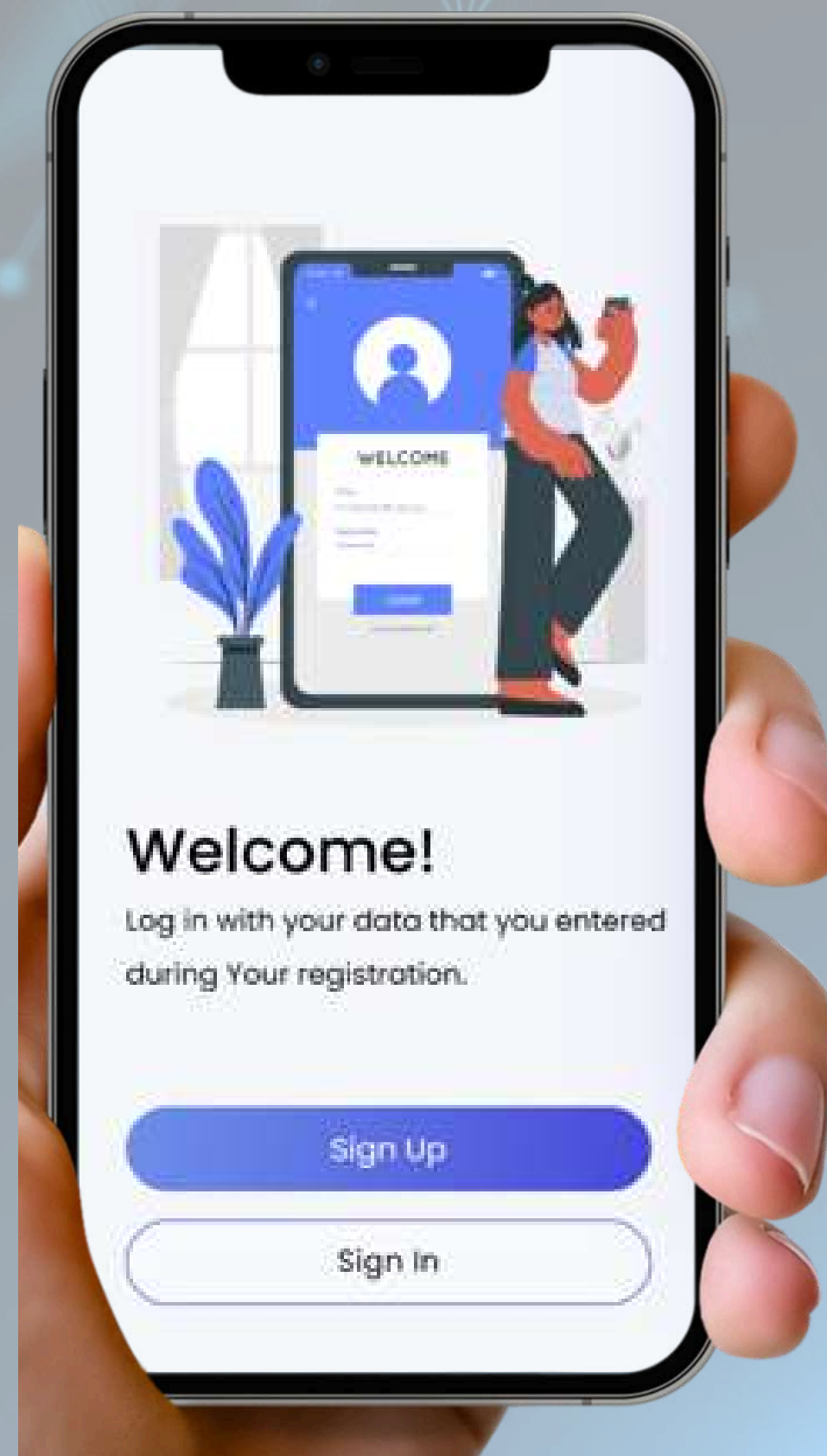
In the context of this scenario, it is assumed that the implementation of DCB would lead to the separation of Paytm's various services into distinct standalone apps. Under this assumption, each app would necessitate separate login credentials, replacing the existing Single Sign-On (SSO) system employed in the unified Paytm app

SINGLE SIGN-ON: MULTIPLE STEPS REQUIRED

PRE DCB



POST DCB (STEP-1)



"Single Sign-On" (SSO) is a user authentication service that permits a user to use one set of login credentials (e.g., username and password) to access multiple applications. The service authenticates the user for all the applications they have been given rights to and eliminates further prompts when they switch applications during the same session.

Pre- DCB:

Before the implementation of the DCB, Paytm employed a Single Sign-On (SSO) system, which allowed users to access multiple features such as payments, shopping, and ticket booking using a single login. By signing into their Paytm accounts, users could effortlessly transition between these services without the need for additional authentication. This streamlined approach resulted in time savings and reduced friction, thereby enhancing the user experience.

Post DCB:

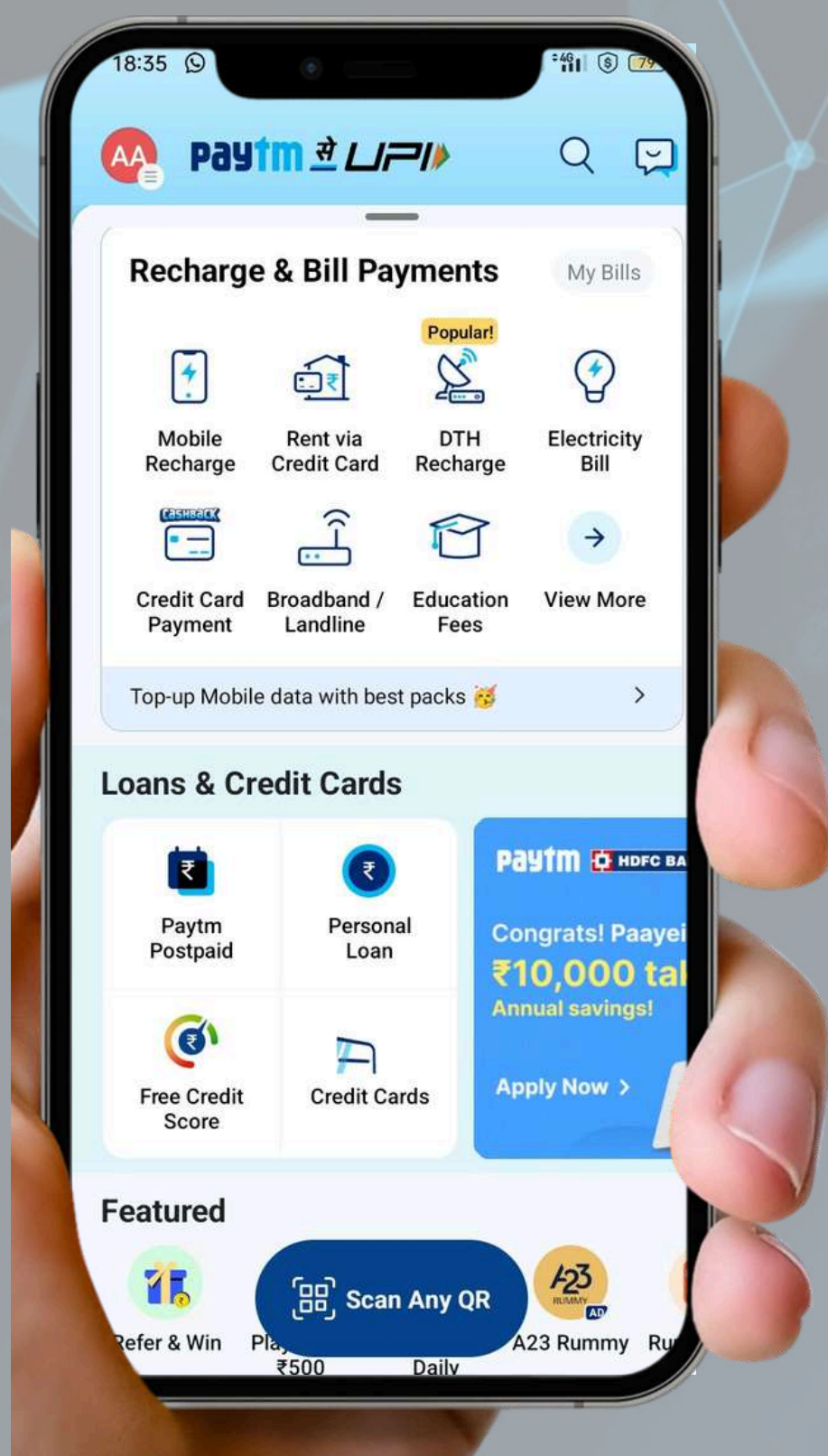
Following the implementation of the DCB, the scenario arises where services are unbundled, leading to the creation of separate apps for each service. (Article 15 of the DCB mandates a SSDE to not require or incentivise business users or end users of the identified Core Digital Service to use one or more of its other products or services, or those of related parties; or third parties with whom the Systemically Significant Digital Enterprise has arrangements for the manufacture and sale of products or provision of services alongside the use of the identified Core Digital Service, unless the use of such products or services is integral to the provision of the Core Digital Service). As a consequence, users may need to utilize distinct login credentials for each app, potentially causing a loss of convenience associated with the Single Sign-On (SSO) system.

For instance, individuals using the Paytm platform might be required to sign in separately to the Paytm Payments app, the Paytm Shopping app, and the Paytm Tickets app whenever they intend to utilize a specific service. This fragmentation could introduce a more disjointed user experience.

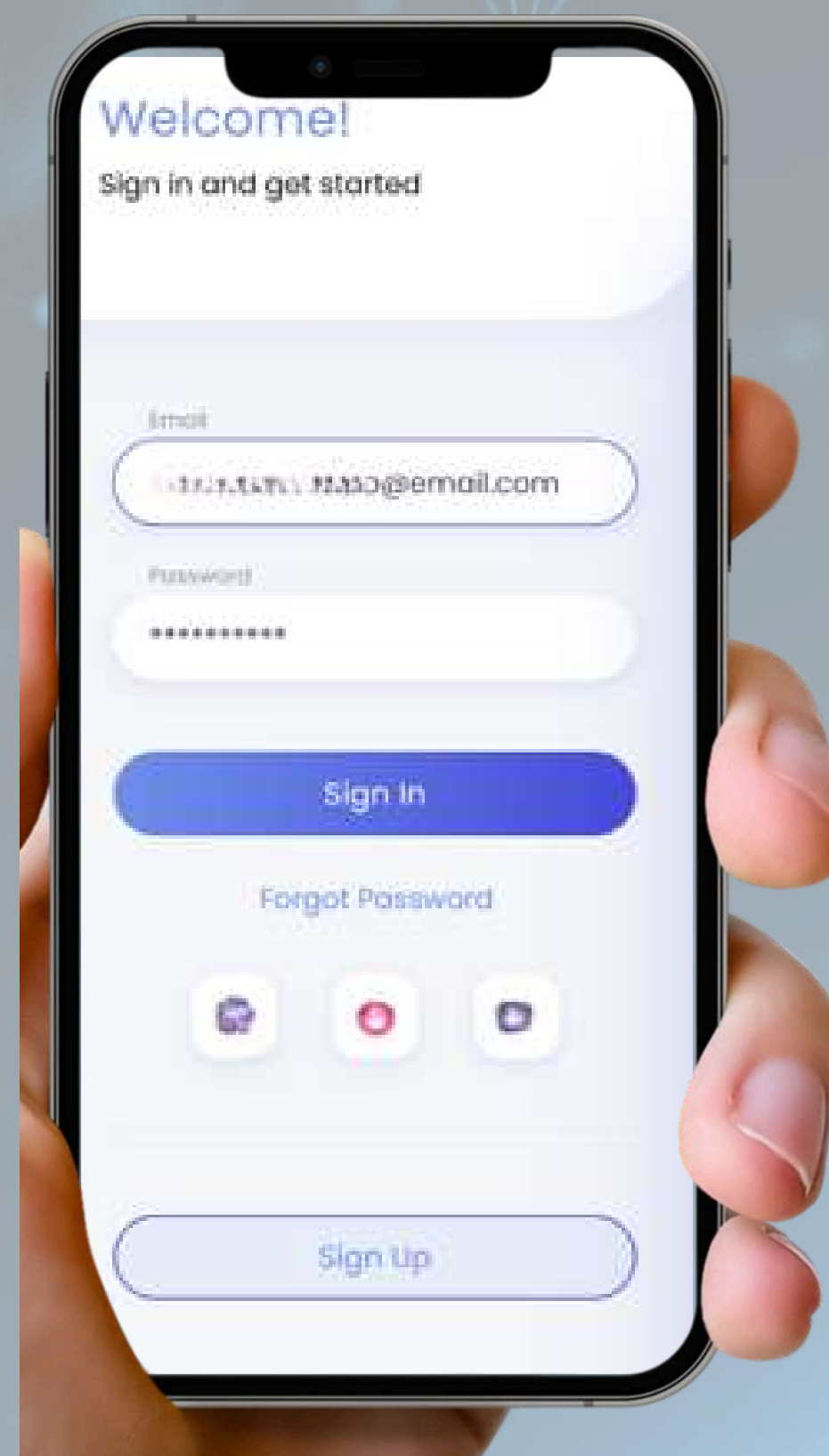
Moreover, users may have to remember multiple sets of login details, increasing the likelihood of forgotten passwords and necessitating more frequent password resets. This heightened complexity has the potential to discourage users, particularly those with limited technological proficiency, resulting in reduced overall engagement with the various apps.

SINGLE SIGN-ON: MULTIPLE STEPS REQUIRED

PRE DCB



POST DCB (STEP-2)



"Single Sign-On" (SSO) is a user authentication service that permits a user to use one set of login credentials (e.g., username and password) to access multiple applications. The service authenticates the user for all the applications they have been given rights to and eliminates further prompts when they switch applications during the same session.

Pre- DCB:

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Post DCB:

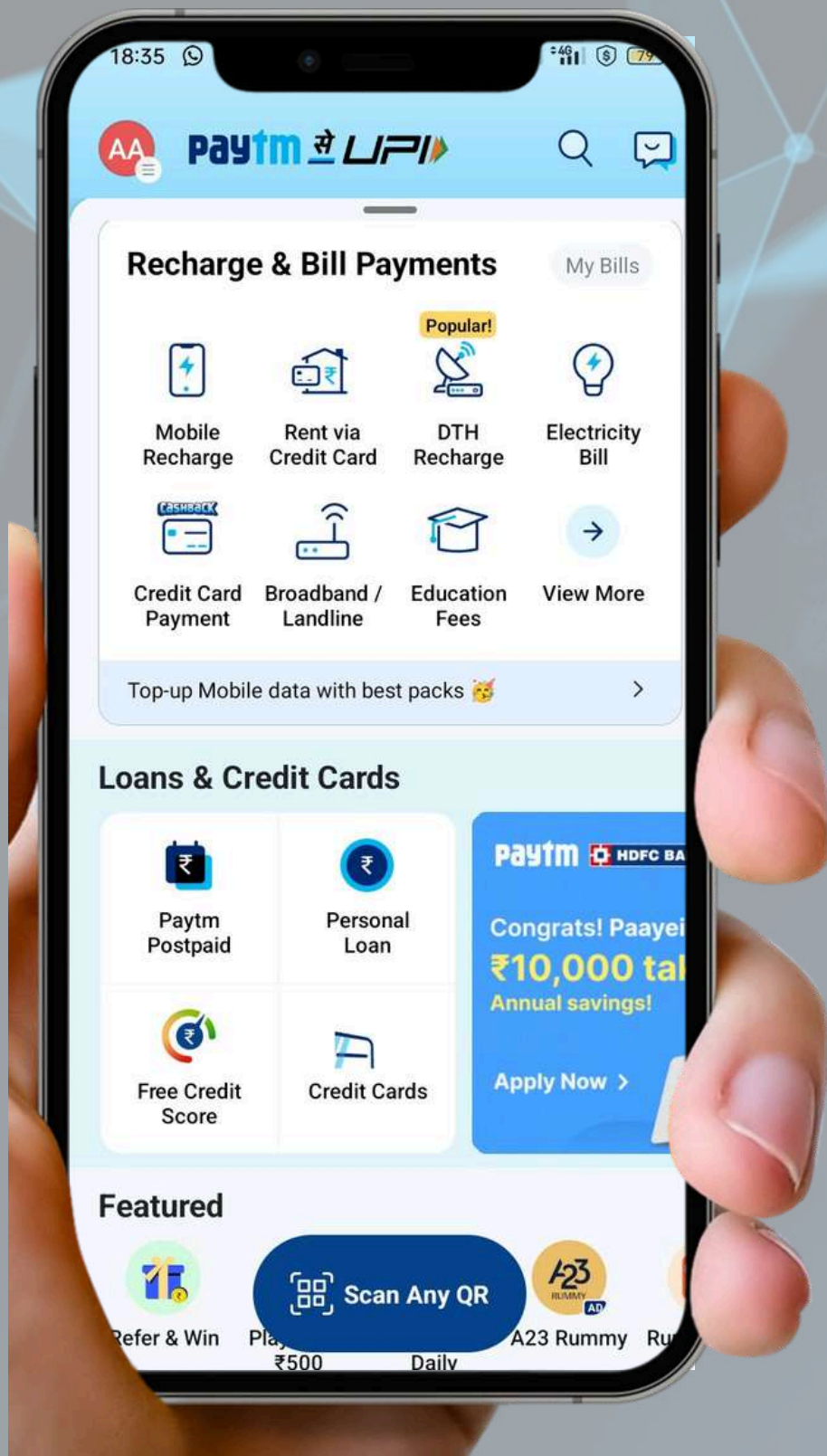
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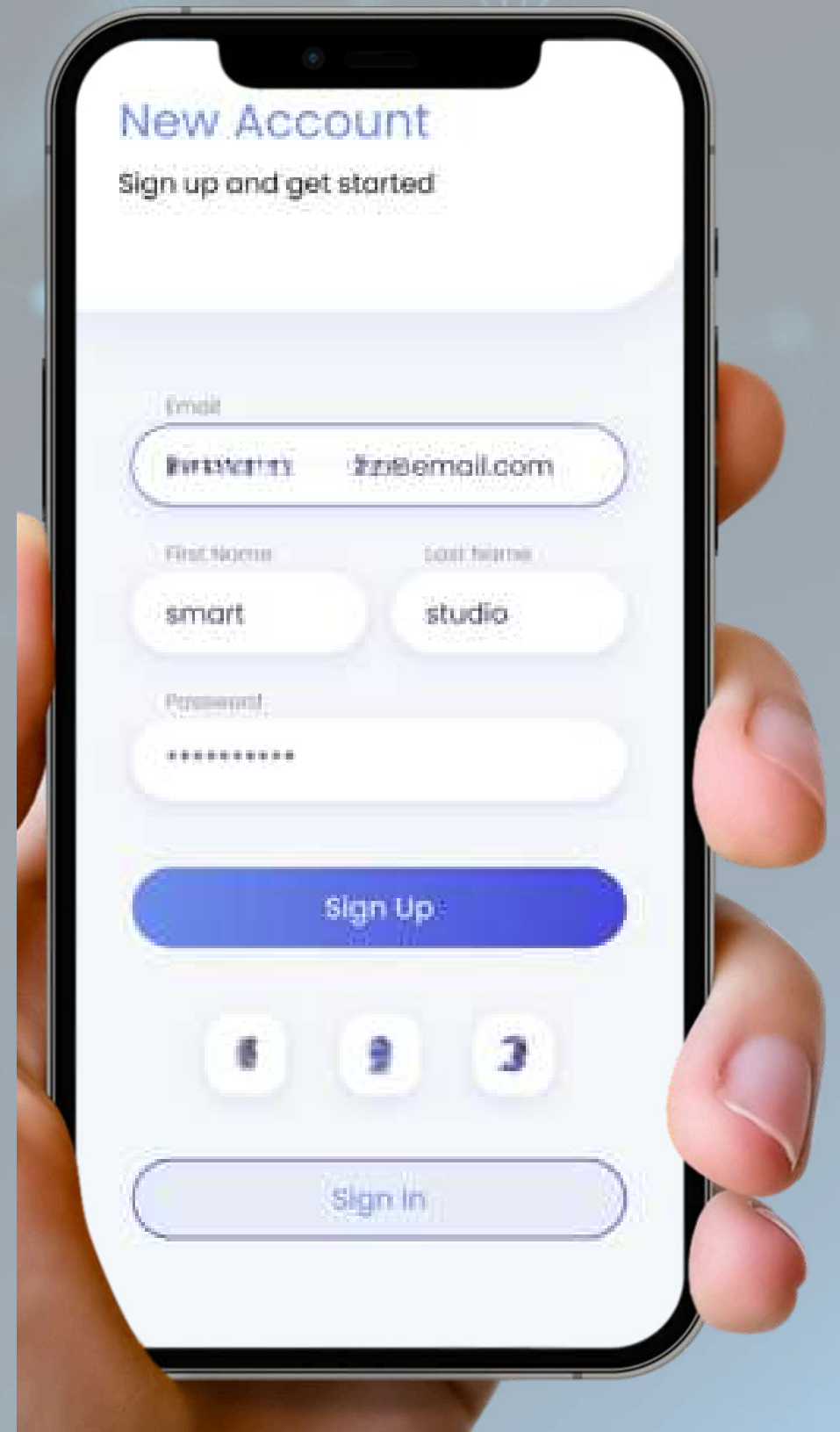
Moreover, users may have to remember multiple sets of login details, increasing the likelihood of forgotten passwords and necessitating more frequent password resets. This heightened complexity has the potential to discourage users, particularly those with limited technological proficiency, resulting in reduced overall engagement with the various apps.

SINGLE SIGN-ON: MULTIPLE STEPS REQUIRED

PRE DCB



POST DCB (STEP-3)



"Single Sign-On" (SSO) is a user authentication service that permits a user to use one set of login credentials (e.g., username and password) to access multiple applications. The service authenticates the user for all the applications they have been given rights to and eliminates further prompts when they switch applications during the same session.

Pre- DCB:

Before the implementation of the DCB, Paytm employed a Single Sign-On (SSO) system, which allowed users to access multiple features such as payments, shopping, and ticket booking using a single login. By signing into their Paytm accounts, users could effortlessly transition between these services without the need for additional authentication. This streamlined approach resulted in time savings and reduced friction, thereby enhancing the user experience.

Post DCB:

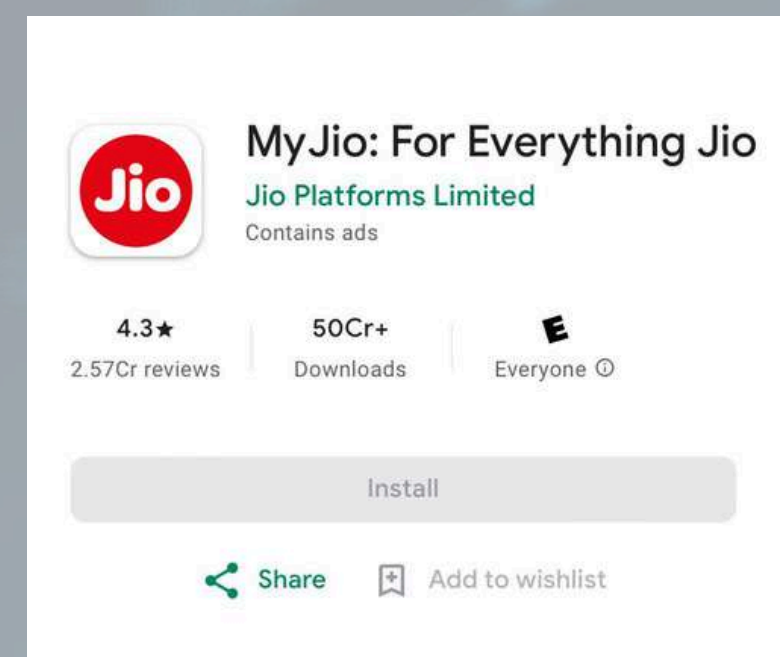
Following the implementation of the DCB, the scenario arises where services are unbundled, leading to the creation of separate apps for each service. As a consequence, users may need to utilize distinct login credentials for each app, potentially causing a loss of convenience associated with the Single Sign-On (SSO) system.

For instance, individuals using the Paytm platform might be required to sign in separately to the Paytm Payments app, the Paytm Shopping app, and the Paytm Tickets app whenever they intend to utilize a specific service. This fragmentation could introduce a more disjointed user experience.

Moreover, users may have to remember multiple sets of login details, increasing the likelihood of forgotten passwords and necessitating more frequent password resets. This heightened complexity has the potential to discourage users, particularly those with limited technological proficiency, resulting in reduced overall engagement with the various apps.



MyJio, the popular mobile application developed by Reliance Jio Infocomm Limited, offers users a comprehensive suite of services, making it a go-to platform for millions across India. It has more than 50 crores downloads in India and an annual turnover of 91,741 crore rupees.



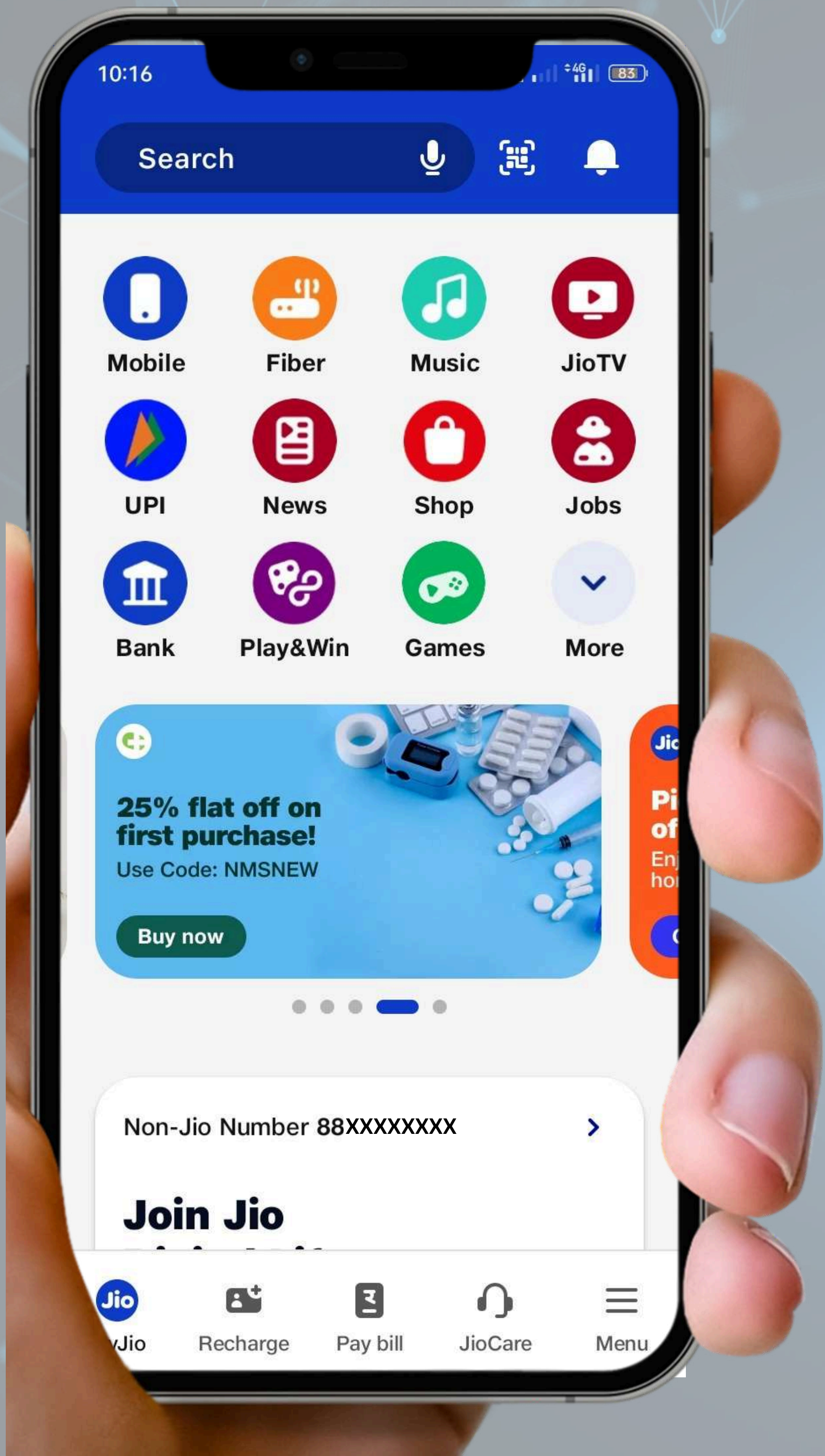
(Source: <https://jep-asset.akamaized.net/jio/investor-relations-debenture/rjil/other-documents/annual-report-of-fy-2022-23.pdf>).

With its user-friendly interface and an ever-expanding range of offerings, MyJio has successfully captured a massive consumer base.

At its core, MyJio provides users with seamless access to a variety of digital services. It simplifies mobile recharge and bill payments, allowing users to effortlessly stay connected. Users can explore and choose from a range of prepaid and postpaid plans that suit their needs, making it convenient to manage their mobile accounts.

Beyond basic connectivity services, MyJio encompasses an array of value-added features. Users can indulge in a world of entertainment through JioCinema, which offers a vast library of movies and TV shows across genres. JioTV provides live TV streaming with a diverse selection of channels, while JioSaavn delivers a vast collection of music for every mood.

MyJio Homepage





CONSENT POP-UPS & INTERSTITIAL POP-UPS

PARAMETER: CONSENT POP-UPS & INTERSTITIAL POP-UPS

After the implementation of DCB, the SSDE's would be required to take consent of end users or business users to intermix or cross use their personal data collected from different services including its core digital service or permit usage of such data by any third party.

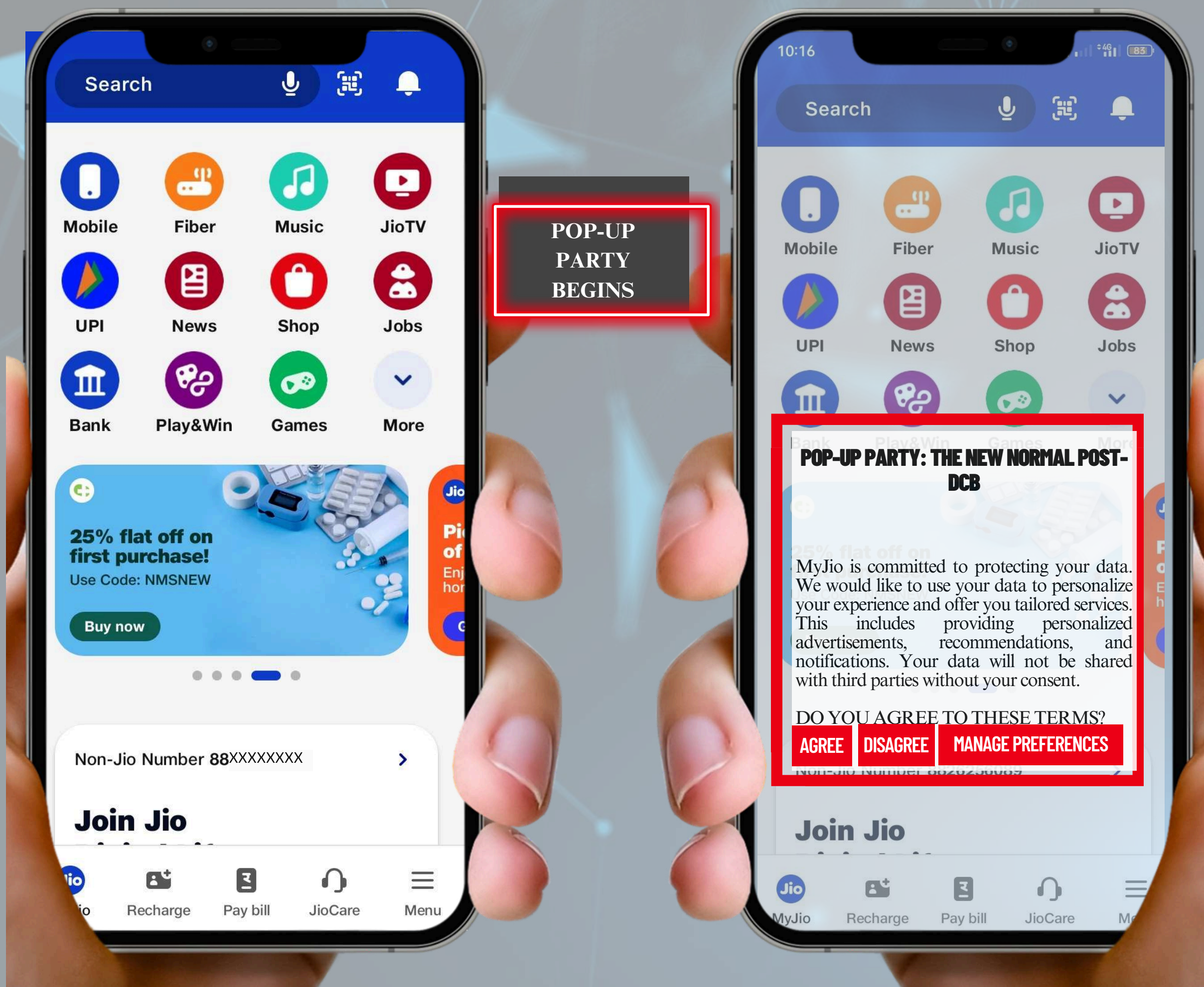
In the slide below, the possible modification in user interface has been showcased. In the illustrations, the user may come across a pop-up - 'Pop-Up Party' - to seek their consent for data usage, even before they land on the home page.

These assumptions would help paint a comparative picture of the pre and post-DCB scenarios and the potential changes in user experience.

CONSENT POP-UPS

PRE DCB

POST DCB



PRE DCB:

Before the implementation of the DCB, accessing an app like MyJio was a seamless experience. When a user opened the MyJio app, they were directly taken to the home page. No consent pop-ups interrupted the user's journey.

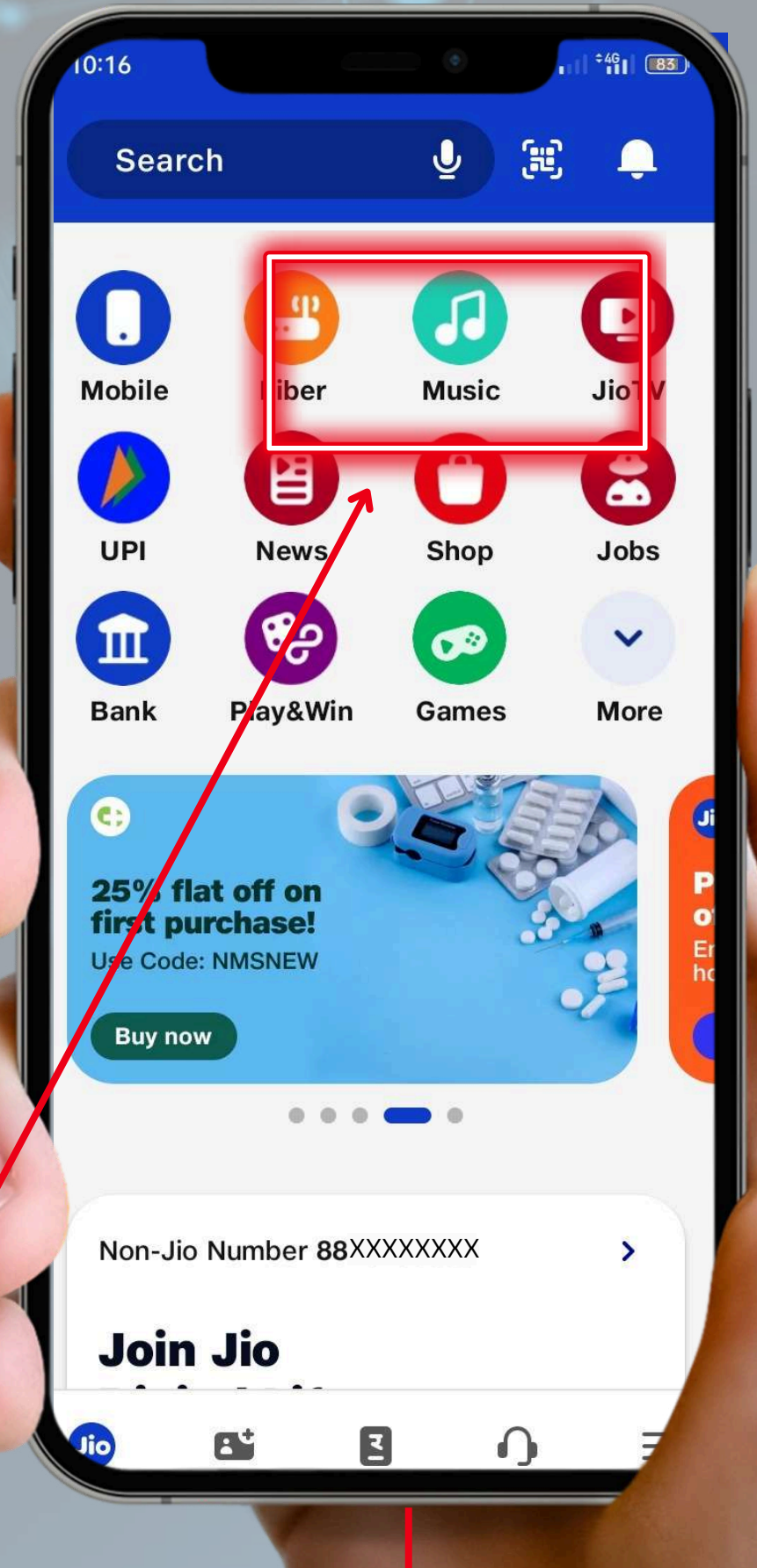
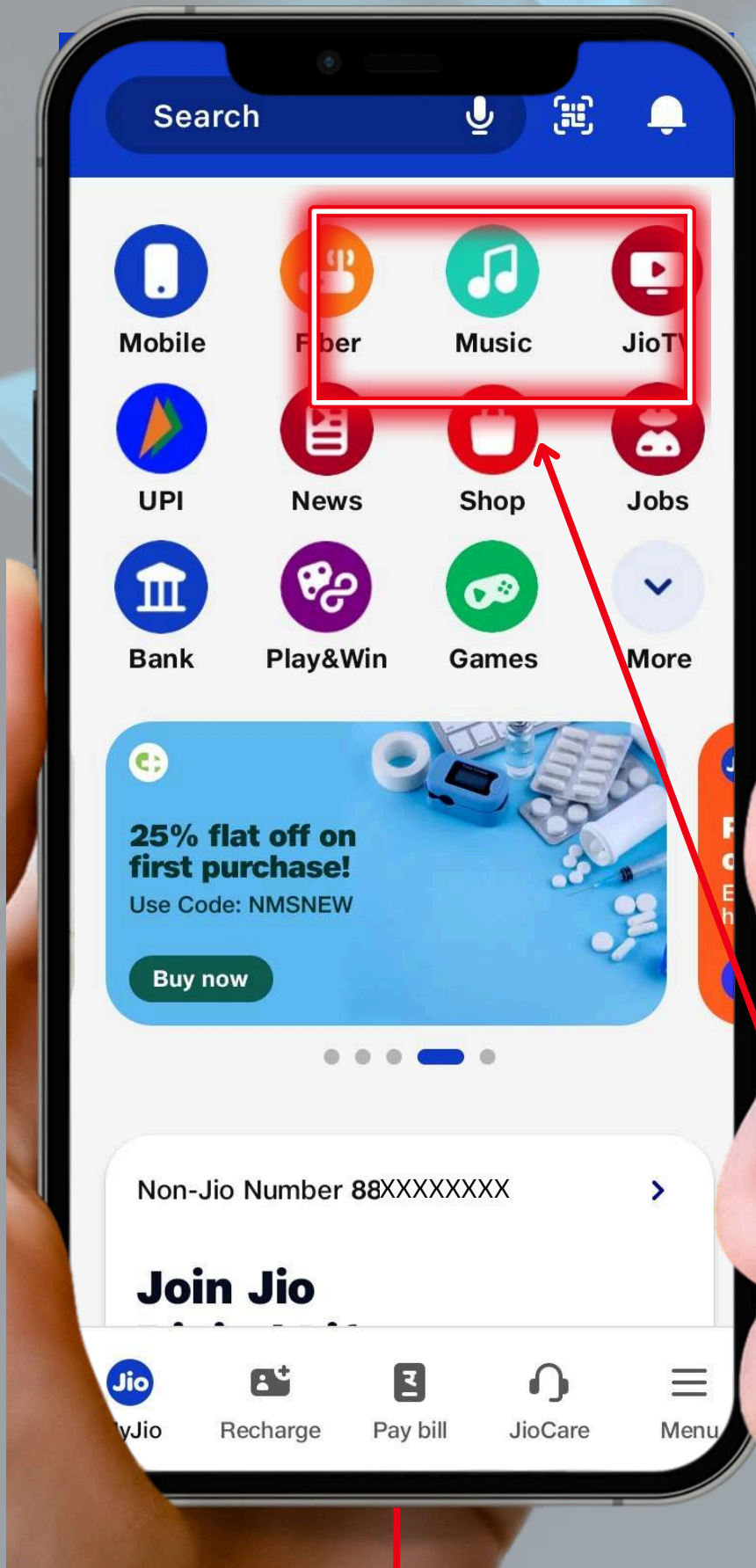
POST DCB:

With the DCB in place, the app's interface undergoes a significant change. Now, upon opening the MyJio app, users are immediately greeted with a pop-up, somewhat humorously referred to as a "Pop-Up Party." This pop-up requires consent of end users and business users to intermix or cross use their personal data collected from different services including SSDE's Core Digital Service or permit usage of such data by third party (Article 12 (2) of DCB)

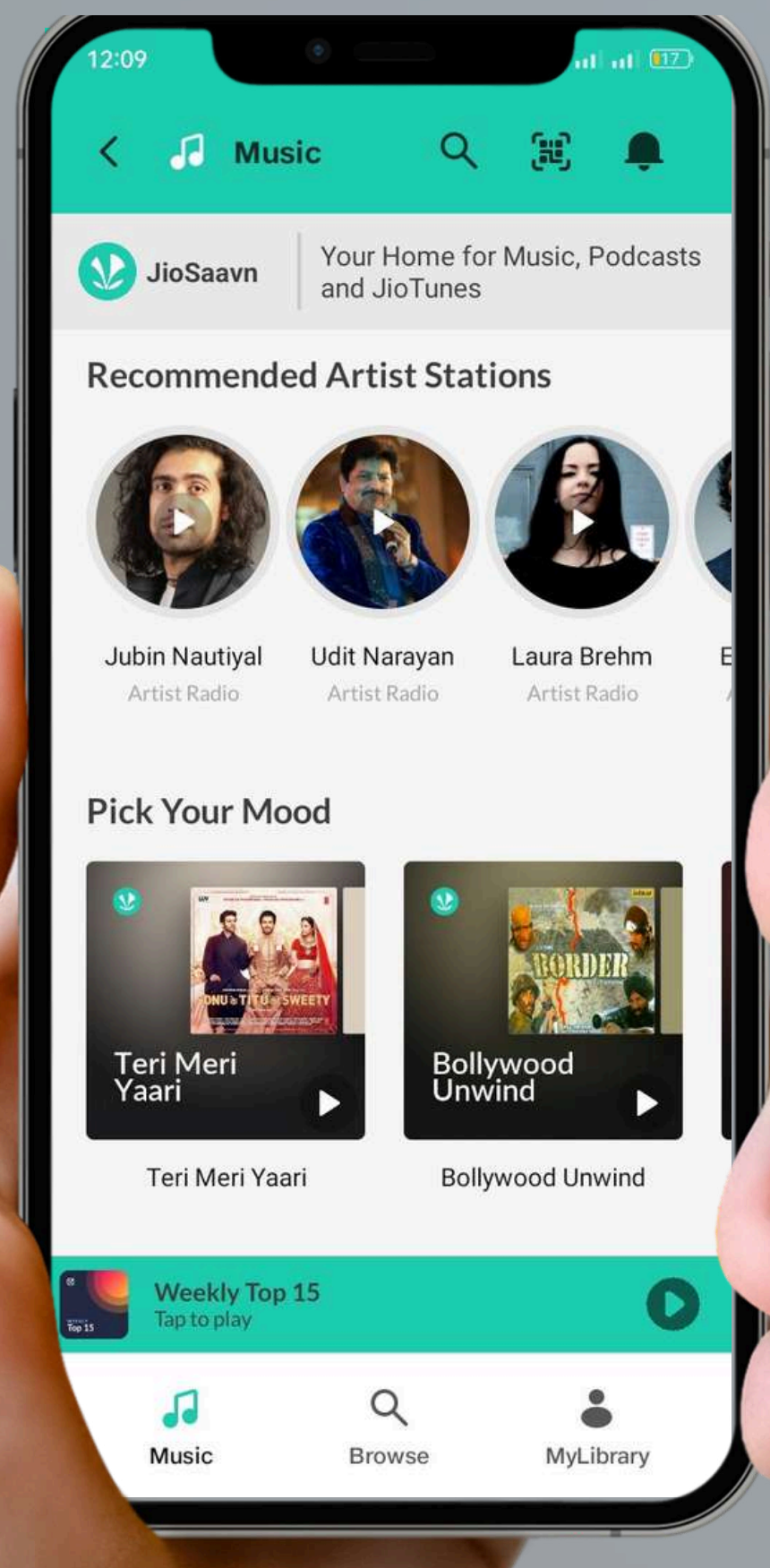
INTERSTITIAL POP-UPS

PRE DCB

POST DCB

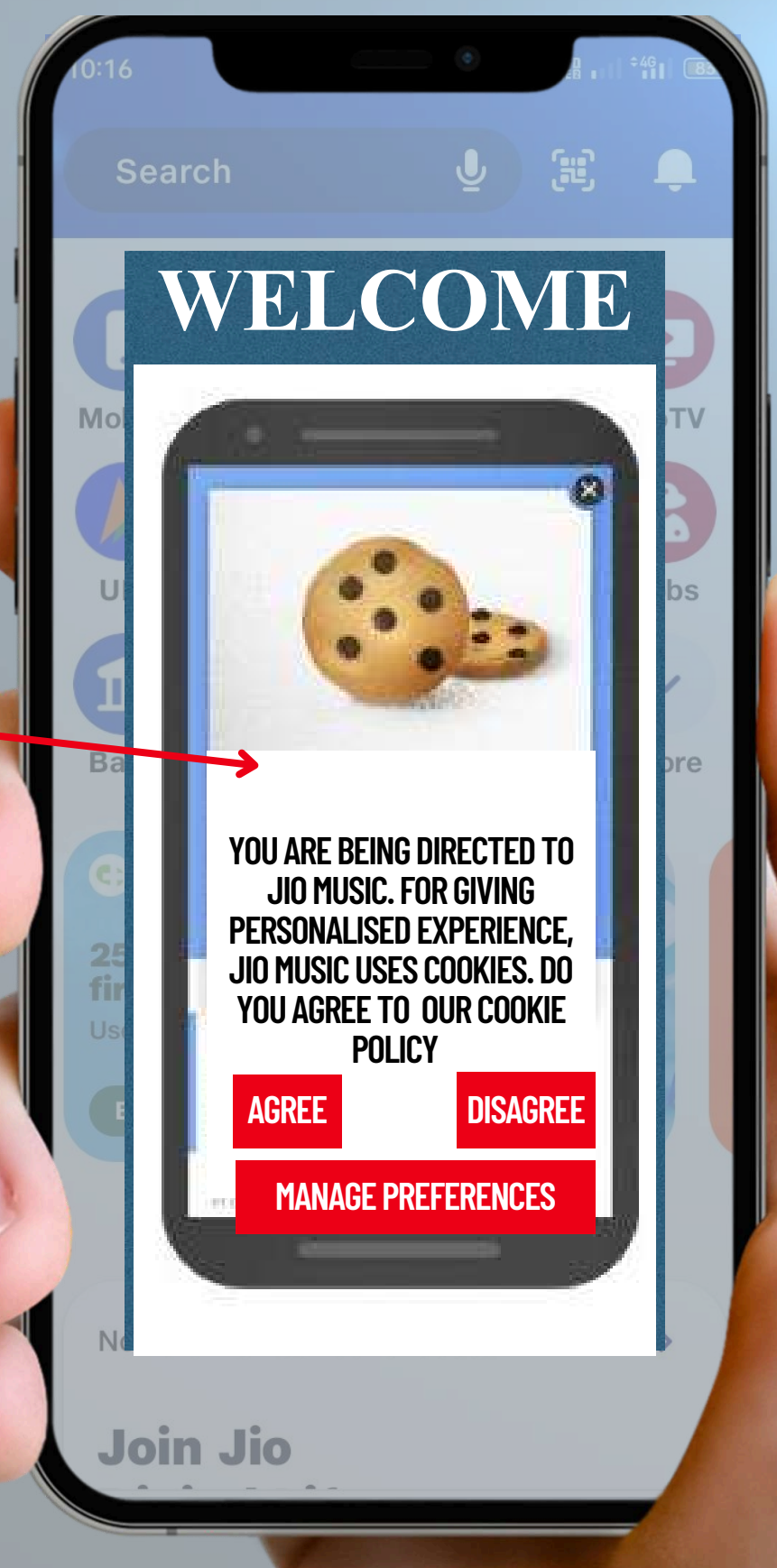


**Choosing
JioMusic**



**DIRECTED TO
JIOMUSIC
DIRECTLY**

**INTERSTITIAL POP
REQUESTING FOR
COOKIE MANAGEMENT
BEFORE BEING
DIRECTED TO JIOMUSIC**



PRE DCB:

Before the implementation of the DCB, accessing different services within the app requires fewer interstitials. Once the user selected a particular service, they were directly taken to it. For example, if the user chose "JioMusic" from the MyJio App, they were immediately directed to the JioMusic service without encountering any interstitials.

POST DCB:

With the DCB in place, there will be significant changes to the app's interface. Now, when a user selects a particular service, they will encounter interstitials. These interstitials may request age verification or cookie management, or simply explain the services they are about to access. In the given scenario, after the implementation of DCB, the app has to obtain consent from end users or business users to redirect the user to the chosen service. (Article 12 (2) of the DCB).



INCREASED USER AUTHENTICATION AND MANUAL INPUT REQUIREMENTS

PARAMETER: INCREASED USER AUTHENTICATION AND MANUAL INPUT REQUIREMENTS

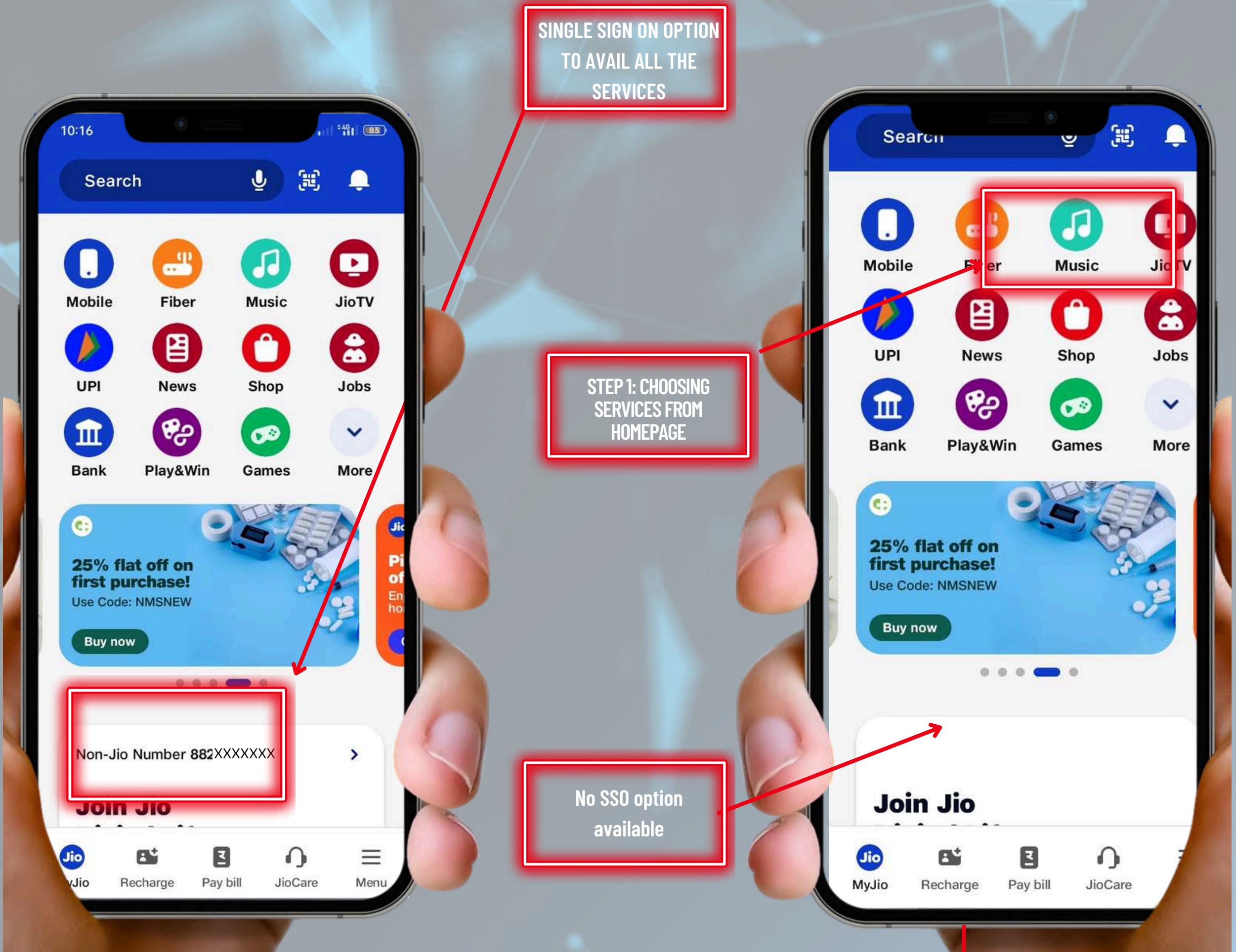
MyJio provides a wide range of services from its home page, which are separately on the playstore. Prior to the implementation of the DCB, the app would store and use the user's address information to automatically fill in the required fields in subsequent transactions, streamlining the purchase process and saving time and effort.

However, in the post-DCB period, due to restrictions on data usage, the app may no longer be able to automatically populate this information. As a result, users are now required to manually input their address for each transaction. This scenario illustrates the potential impact of the DCB on "Increased User Authentication and Manual Input Requirements."

INCREASED USER AUTHENTICATION AND MANUAL INPUT REQUIREMENTS

PRE DCB

POST DCB

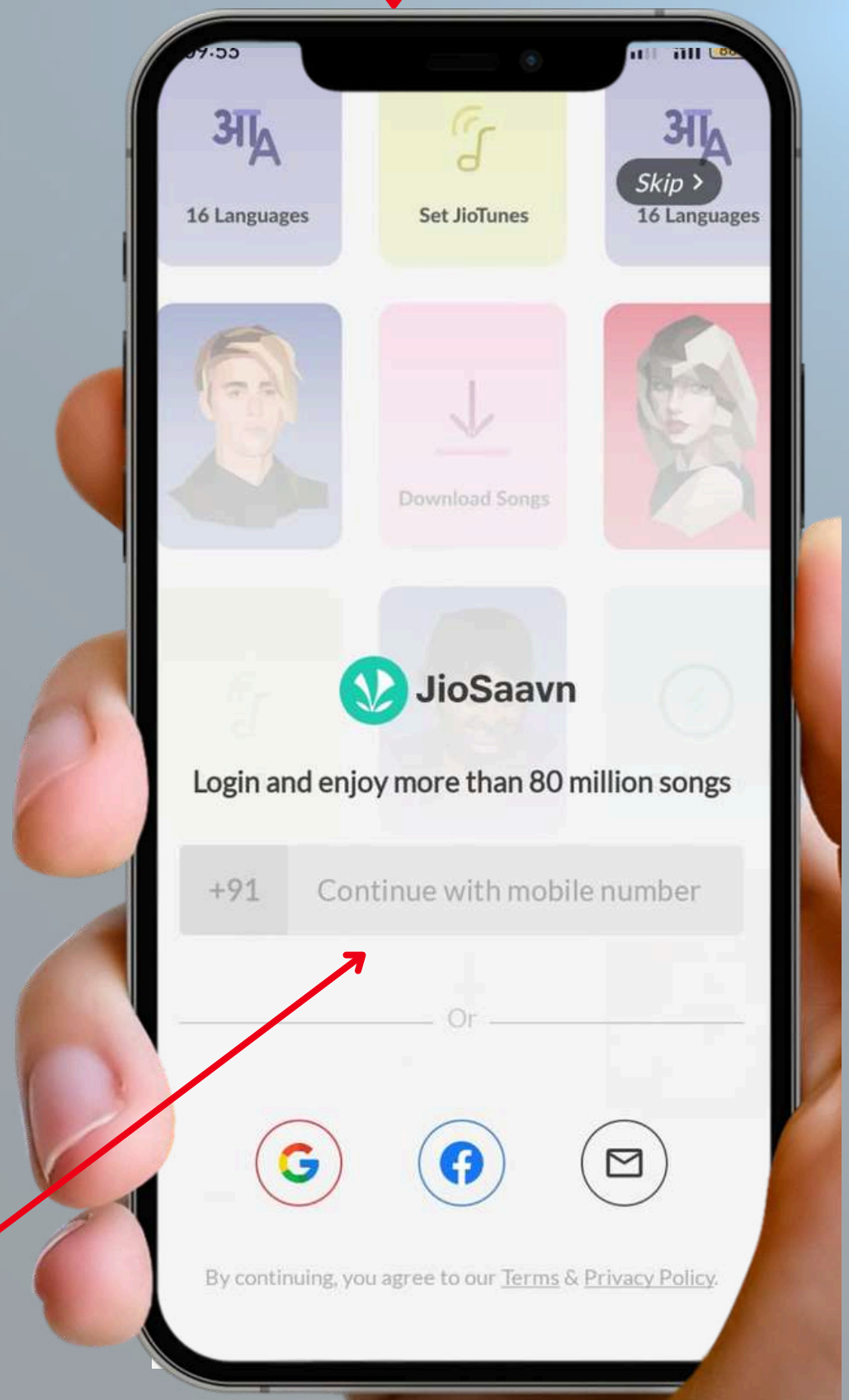


Pre-DCB:

Before the implementation of the DCB, a user's data on MyJio is utilized to provide an efficient and personalized entertainment experience. One such convenience is the automatic sign-on. It uses stored data to auto-fill the address during the checkout process, sparing the user from repeated manual input and saving their time.

Post DCB:

With the regulations put forth by the DCB, there might be changes in the way platforms use consumer data. The SSDE's have to obtain consent of end users or business users to intermix or cross use the personal data collected from different services including Core Digital Service (Article 12(2) of the DCB). One potential change could involve users being prompted to manually input their credentials while availing of different services on the same platform. The need for additional manual data entry could potentially add extra steps to the user's app interaction process, affecting the ease and speed of their experience on the platform.





MakeMyTrip (MMT) is an established online travel company in India that provides a range of services to assist travelers in planning and booking their trips. Whether you're in search of flights, hotels, holiday packages, or other travel-related services, MakeMyTrip offers a convenient one-stop solution. MMT has garnered over 50 million downloads on Google Play store and Apple Store combined and an annual turnover of 5,93,036 (4964.65 crore INR), showcasing its widespread popularity and reach.

MMT offers a comprehensive array of services to cater to the diverse needs of travelers. They facilitate domestic and international flight bookings, hotel reservations, holiday package options, as well as bus and train ticket bookings. Their user-friendly website and mobile app make it effortless for customers to search, compare, and secure the best available deals.



Source:
<https://www.makemytrip.com/about-us.html>



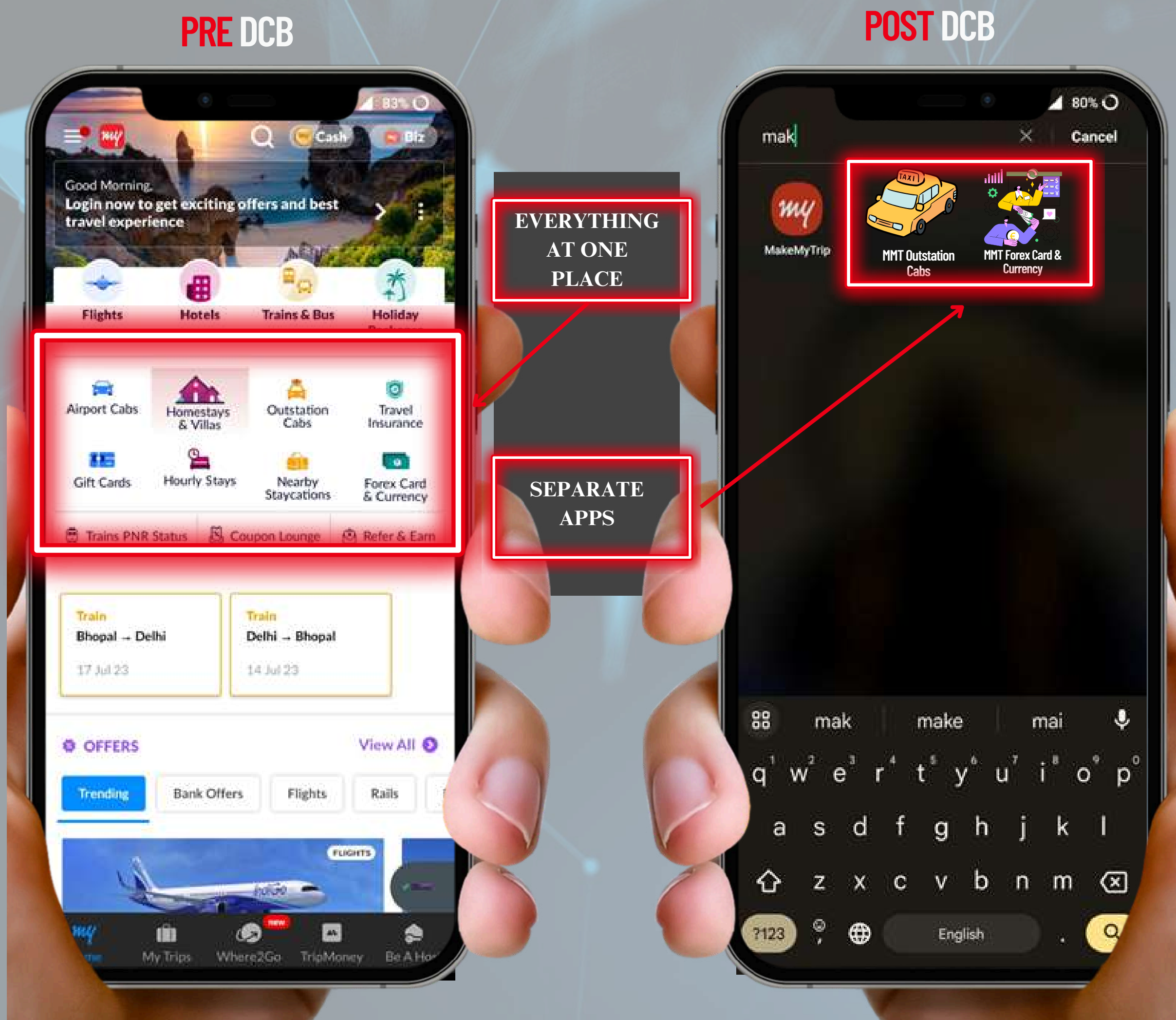
make **my** trip

INTEGRATED SERVICES

PARAMETER: INTEGRATED SERVICES

In the context of this analysis, DCB has mandated SSDE's to integrate or "unbundle" their services. This implies that the capability to offer multiple interconnected services within a single application will be limited. Consequently, it is also speculated that this unbundling process might have implications for the convenience and seamless user experience that MMT users presently experience.

INTEGRATED SERVICES



PRE DCB:

In the scenario prior to the implementation of the DCB, MMT strategically utilized different services to enhance its user experience. Users were able to navigate seamlessly within the MMT application, engaging in diverse activities such as outstation cabs, airport cabs, hourly stays, staycations, forex card & currency, etc. This approach offered users a convenient experience, leading to increased user engagement and transaction volume on the platform.

POST DCB:

Following the implementation of the DCB, SSDE not require or incentivise business users or end users of the identified Core Digital Service to use its own other products or services or product or services of related parties or third parties with whom the SSDE has arrangement for the manufacture and sale of products or provision of services alongside the use of the identified Core Digital Service, unless the use of such products or services is integral to the provision of the Core Digital Service

Thus, SSDE's could face an obligation to unbundle its services as a compliance measure. This would lead to significant changes in the user experience. For instance, users may need to utilize separate apps or platforms for each service, as depicted in the Post DCB image where distinct applications are provided for "outstation cabs" and "forex card & currency". Consequently, the user experience may become more fragmented and less seamless, as users would have to switch between multiple apps to access different services.

Moreover, this unbundling process may result in the loss of personalized, cross-service recommendations that users previously enjoyed. It could also increase the time and effort required to complete transactions. As a consequence, there is a possibility of decreased user engagement and reduced usage of the MMT platform.



make **my** trip

CONSENT POP-UPS

PARAMETER: CONSENT POP-UPS

In the envisioned scenario, a user's regular utilization of the MMT app for various services unfolds seamlessly, devoid of any consent pop-ups, ensuring a smooth and uninterrupted user journey. This establishes the foundation for the pre-DCB user experience.

However, in the post-DCB environment, SSDE's cannot without the consent of the end users or business users: (a) intermix or cross use the personal data of end users or business users collected from different services including its Core Digital Service; or (b) permit usage of such data by any third party. (Article 12(2) of DCB)

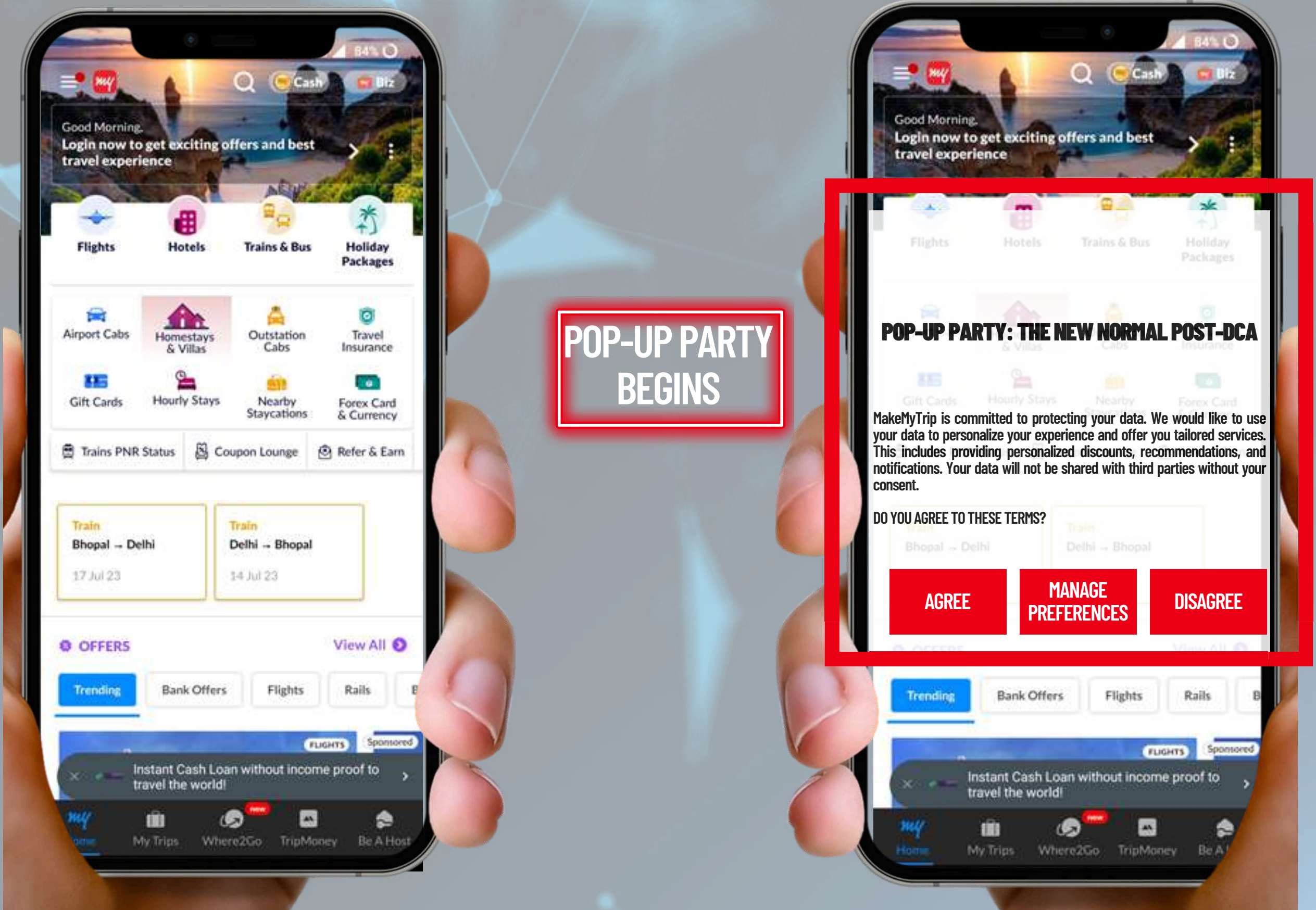
Compliance with DCB mandates the acquisition of explicit user consent for personal data usage, personalization, and tailored services. As a result, it is assumed that users are now confronted with a pop-up notification, humorously named 'Pop-Up Party', seeking their explicit consent for data usage even prior to accessing the home page. This process would increase the consent fatigue among the users and would take longer time to operate the application.

These assumptions lay the groundwork for a comparative analysis between the pre and post-DCB scenarios, shedding light on the potential alterations in the user experience.

CONSENT POP-UPS

PRE DCB

POST DCB



Pre-DCB:

During the pre-DCB period, the user enjoys a hassle-free experience while using the application. Upon opening the MMT app, the user gains immediate access to the homepage without encountering any consent pop-ups. This convenience can be observed in the Pre DCB image, where the user can seamlessly navigate through the app's features.

Post DCB:

In the post-DCB era, users may encounter an increased frequency of pop-ups or notifications that explicitly request consent for data usage. (Article 12(2) of DCB) This heightened presence of consent pop-ups has the potential to disrupt the user experience. The impact of these changes can be visualized in the Post DCB scenario image, where the user encounters a consent pop-up before accessing the application.



make **my** trip

SINGLE SIGN ON SERVICE

PARAMETER: SINGLE SIGN ON SERVICE

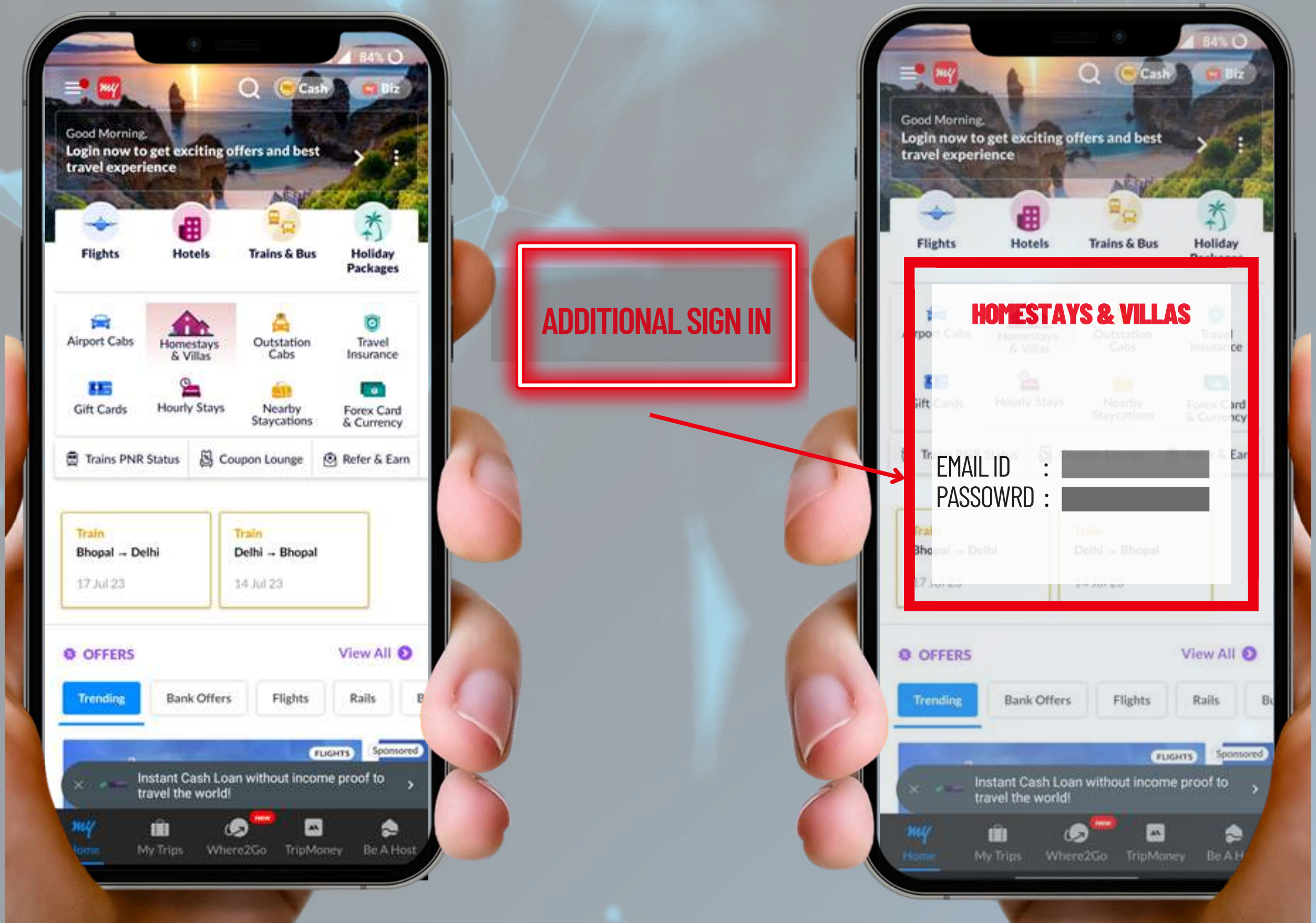
The functionality of the MMT application is influenced by the DCB , consequently affecting the implementation of single sign-on (SSO).

Single sign-on enables users to access multiple services or applications using a single set of login credentials. However, in the post-DCB environment, users may encounter constraints and limitations when attempting to utilize SSO. This could result in difficulties for users in seamlessly accessing multiple services with a single set of login credentials.

SINGLE SIGN ON SERVICE

PRE DCB

POST DCB



Pre-DCB:

In the pre-DCB scenario, it becomes evident that users have the advantage of signing in just once and gaining access to a multitude of services. This feature enables them to effortlessly switch between various functionalities such as flight booking, hotel booking, and more. As a result, the app usage becomes notably more convenient and seamless for the user.

By requiring only a single sign-in process, users can save time and effort by eliminating the need for repetitive login attempts across different services within the application. This streamlined approach allows for quick and efficient transitions between different features and services, enhancing the overall user experience.

Post DCB:

In the post-DCB scenario, SSDE'S are mandated to take consent of end user or business user to intermix or cross use their personal data collected from different services including its Core Digital Service; or permit usage of such data by any third party. (Article 12(2) of DCB).

Therefore, it becomes evident that users are faced with the requirement to sign in separately for each service, resulting in a notable disruption to their overall user experience with the application and impacting its seamlessness.

Upon clicking on the "Homestays & Villas" option in the post-DCB scenario, users encounter the need to provide separate login credentials specifically for this service within the application. This additional step introduces complexity and poses a challenge to the smooth flow of user interactions.

The need for repeated authentication disrupts the seamless experience users would typically expect, as it introduces interruptions and additional steps in their workflow.



make **my** trip

SEAMLESSNESS

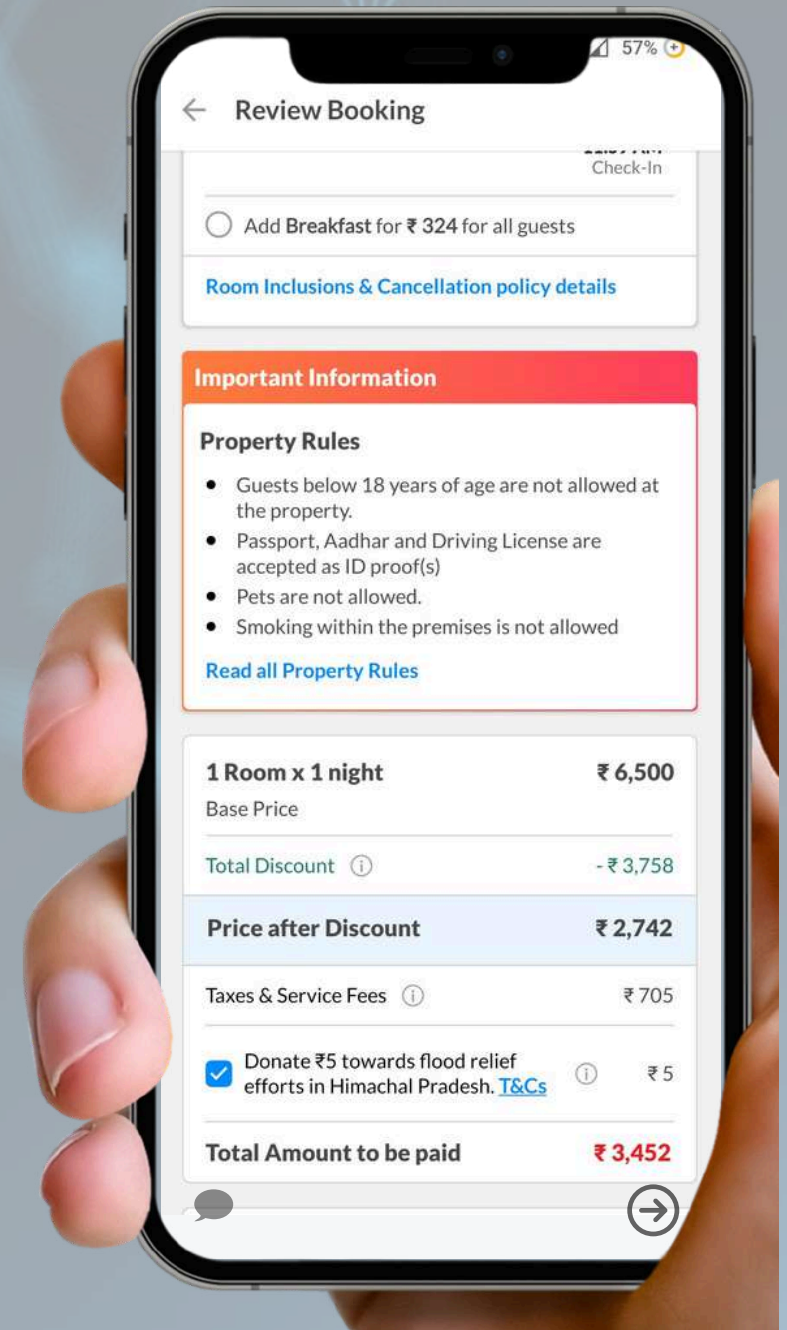
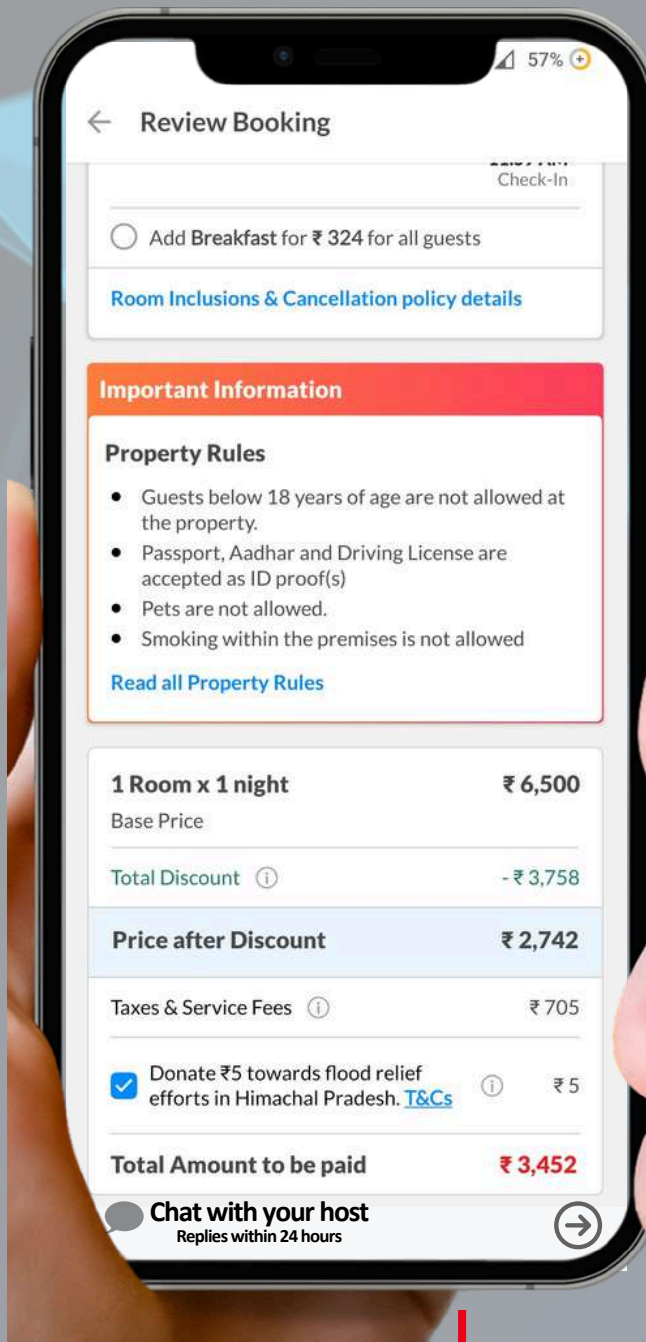
PARAMETER: SEAMLESSNESS

In the assumed scenario, the feature of the MMT app that facilitates user interactions through messaging with the "host" of their accommodation has undergone significant changes due to the implementation of DCB.

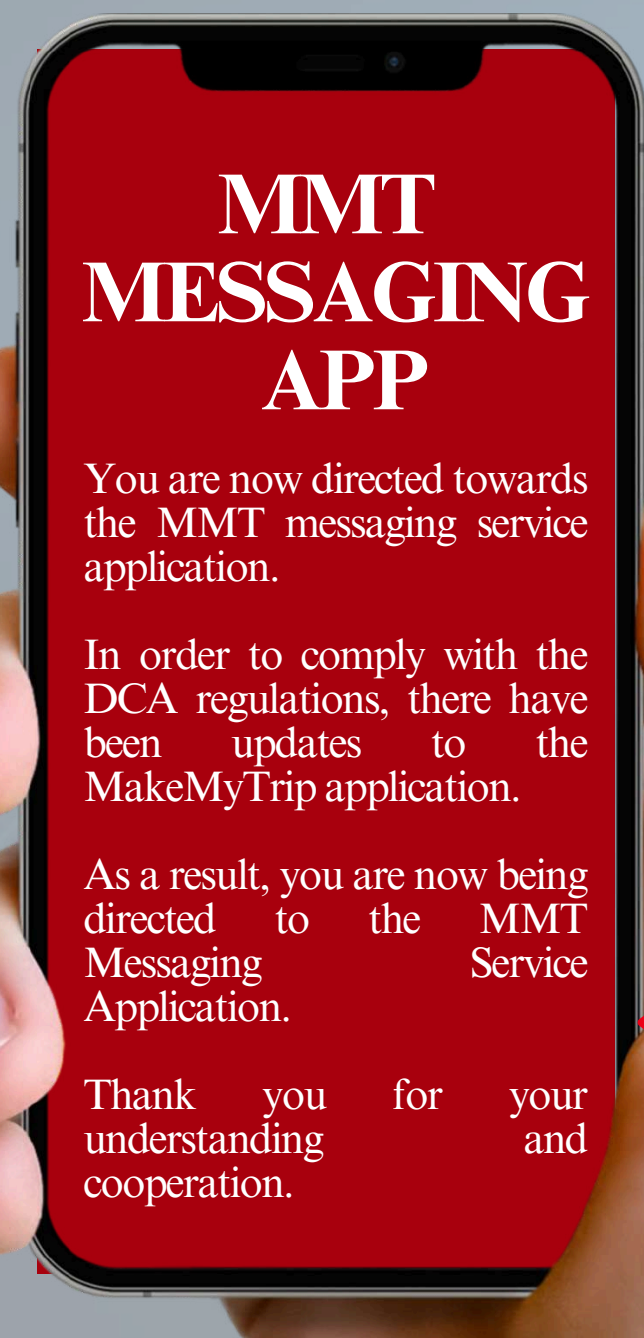
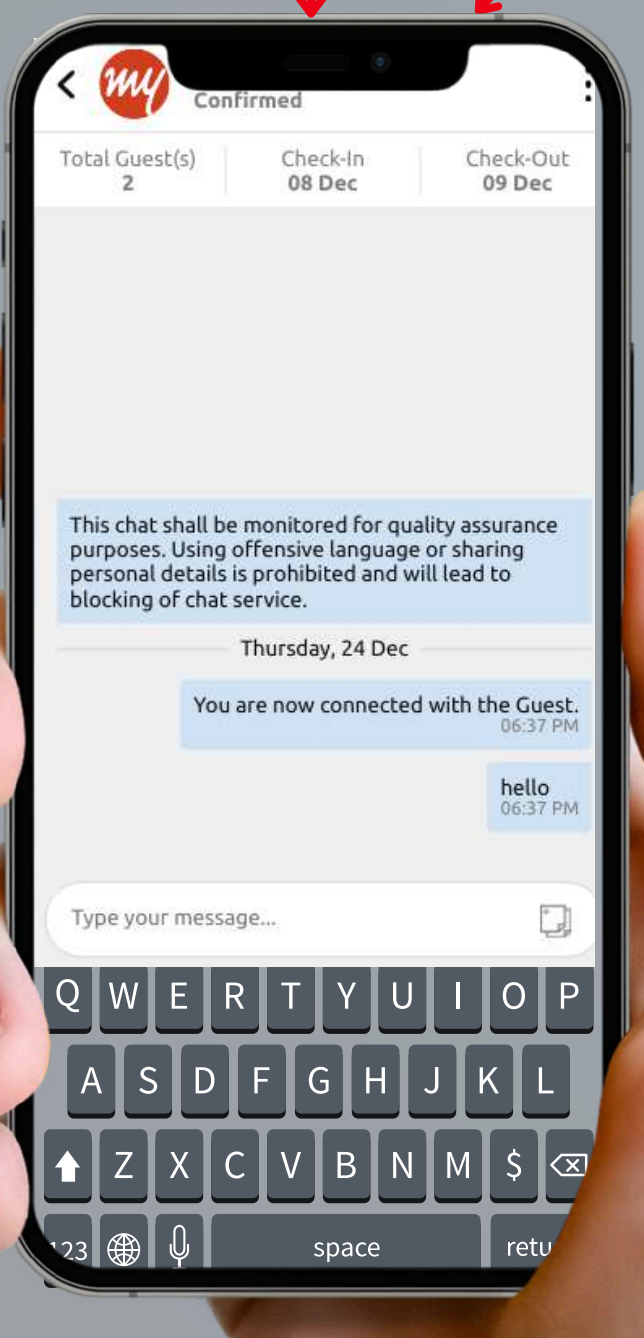
SEAMLESSNESS

PRE DCB

POST DCB



SEAMLESSNESS



SWITCHING APPLICATIONS, AN ADDITIONAL STEP

Pre- DCB:

In the pre-DCB scenario, users had the convenience of directly engaging in conversations with the "host" on the MMT application. This interaction was a straightforward process, involving a single step of clicking on the "chat with your host" feature. Subsequently, users could have direct conversations with the host within the MMT application itself.

Post DCB:

In the post-DCB scenario, a notable change occurs in the process, introducing an additional step for users. As a result of the DCB implementation, the MMT application will redirect users to another messaging service application of MMT. This introduces an extra step in the process, as observed in the scenario described above. Moreover, this alteration significantly impacts the user experience, particularly in terms of the smoothness and seamlessness of the application. It would also increase the possibility of spamming, cyber crime and reduce the security of application.

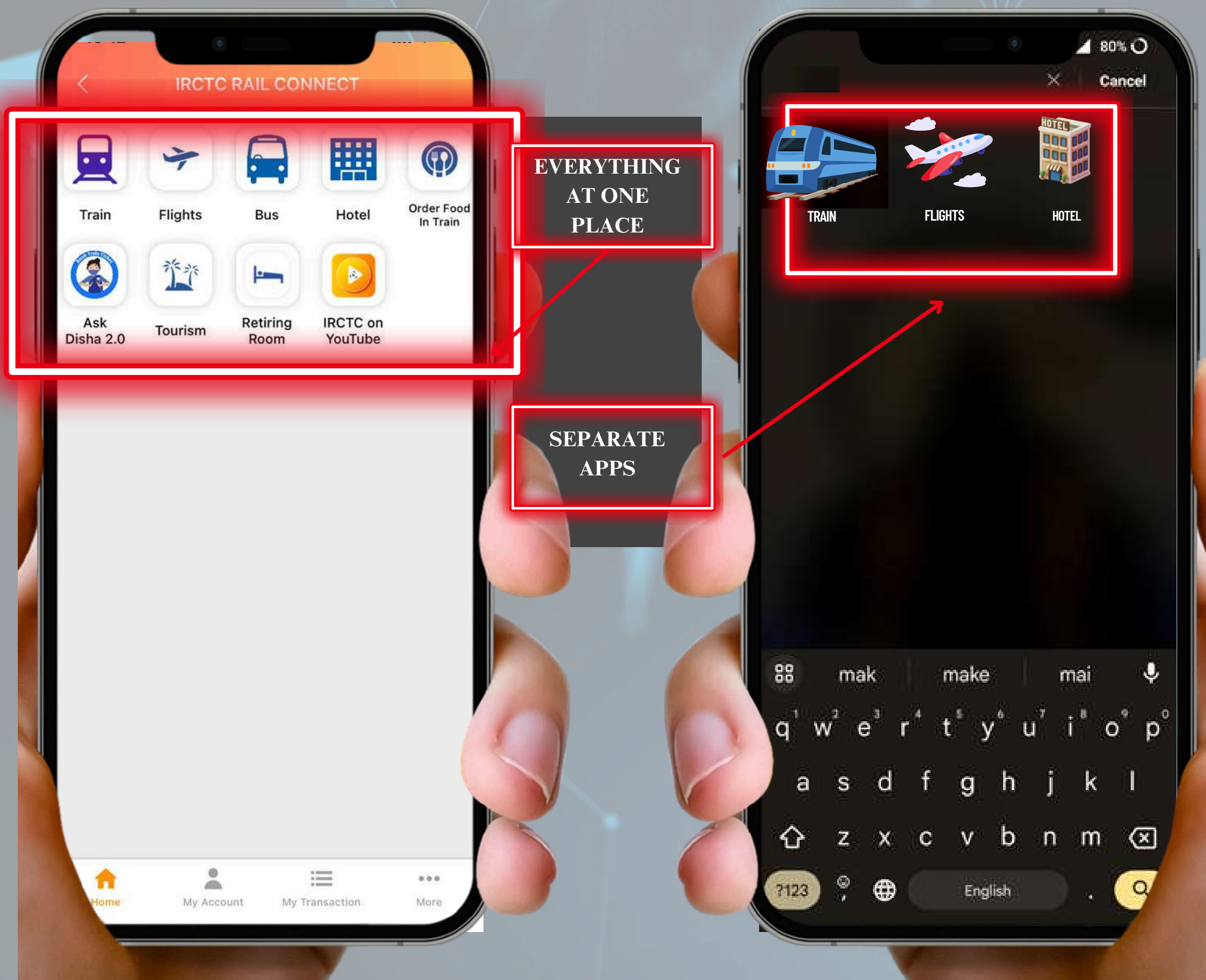


IRCTC Rail Connect

UNBUNDLING

PRE DCB

POST DCB



PRE DCB:

In the scenario prior to the implementation of the DCB, IRCTC strategically utilized different services to enhance its user experience. Users were able to navigate seamlessly within the IRCTC application, engaging in diverse activities such as train bookings, flight bookings, hotel bookings etc. This approach offered users a convenient experience, leading to increased user engagement and transaction volume on the platform.

POST DCB:

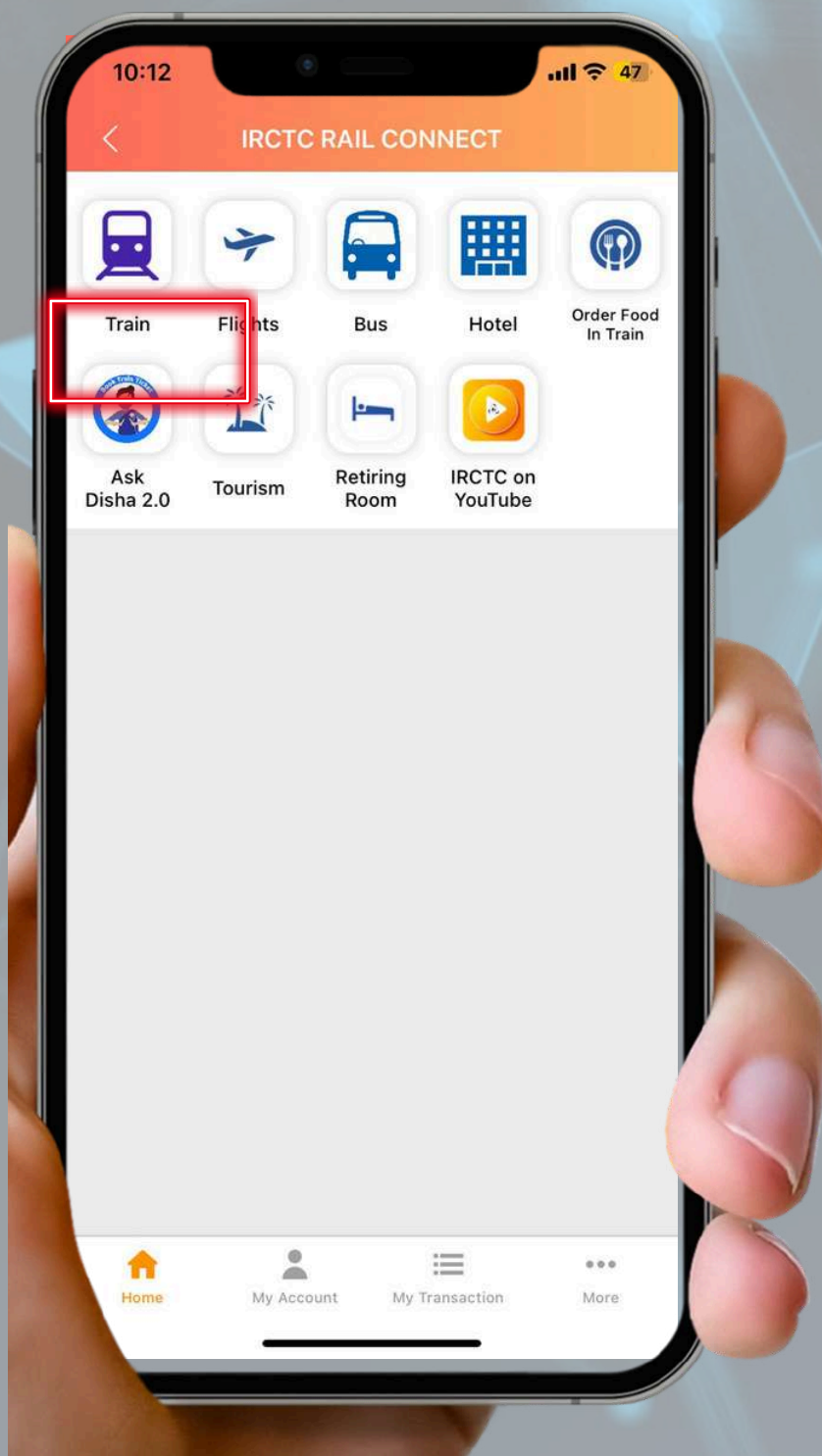
Following the implementation of the DCB, SSDE cannot require or incentivise business users or end users of the identified Core Digital Service to use its own other products or services or product or services of related parties or third parties with whom the SSDE has arrangement for the manufacture and sale of products or provision of services alongside the use of the identified Core Digital Service, unless the use of such products or services is integral to the provision of the Core Digital Service

Thus, SSDE's could face an obligation to unbundle its services as a compliance measure. This would lead to significant changes in the user experience. For instance, users may need to utilize separate apps or platforms for each service, as depicted in the Post DCB image where distinct applications are provided for "train bookings" and "flight bookings". Consequently, the user experience may become more fragmented and less seamless, as users would have to switch between multiple apps to access different services.

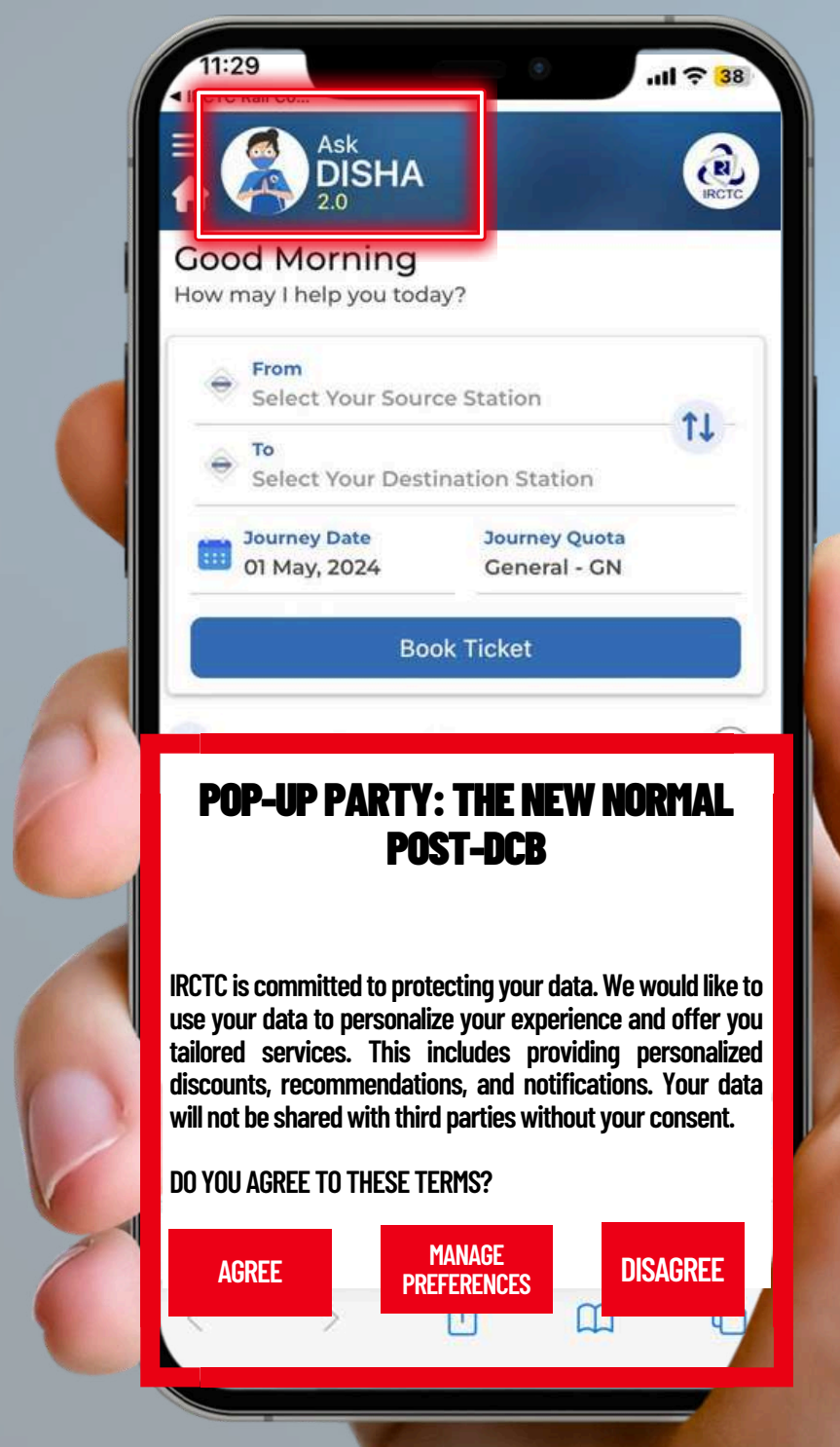
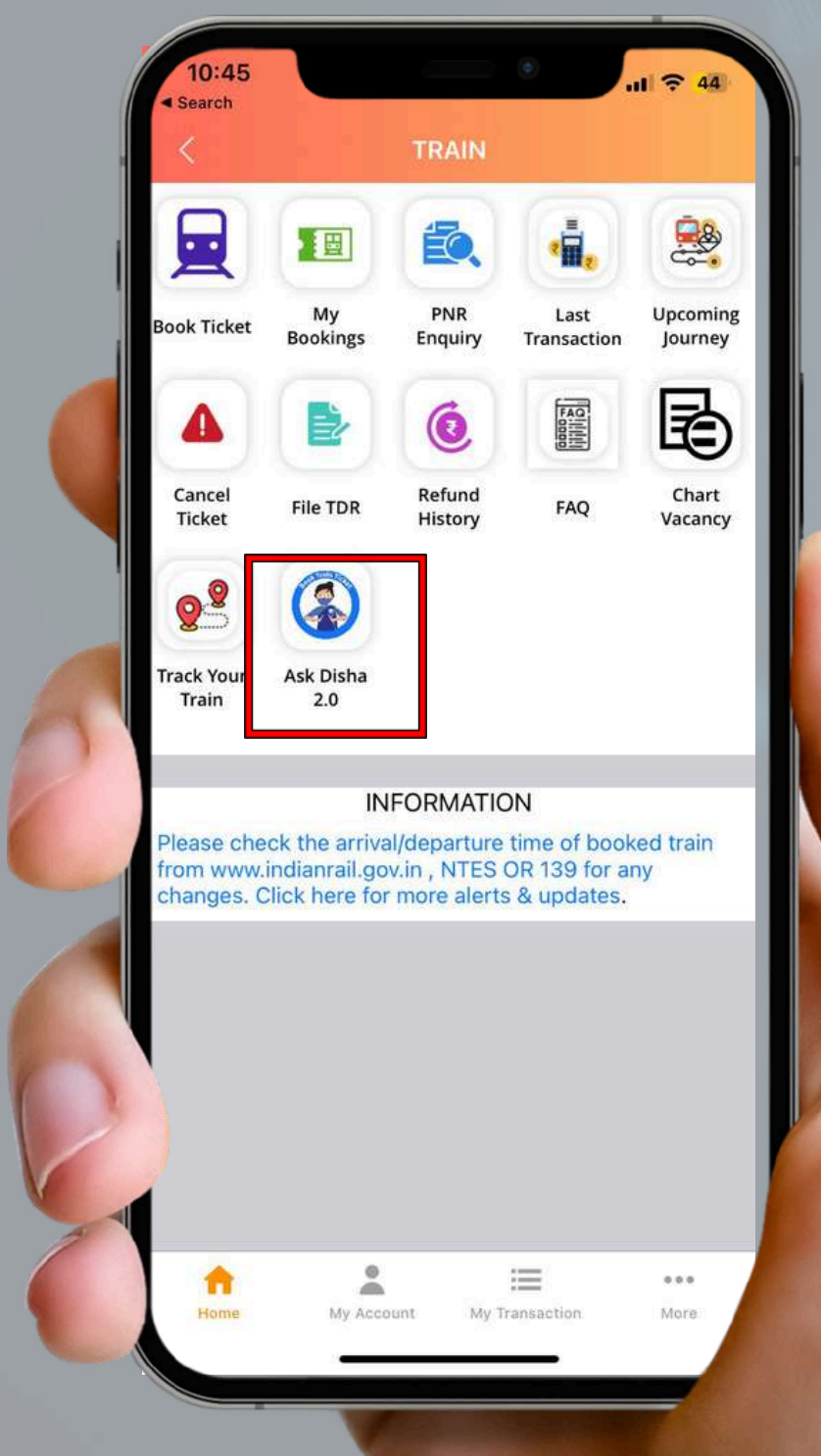
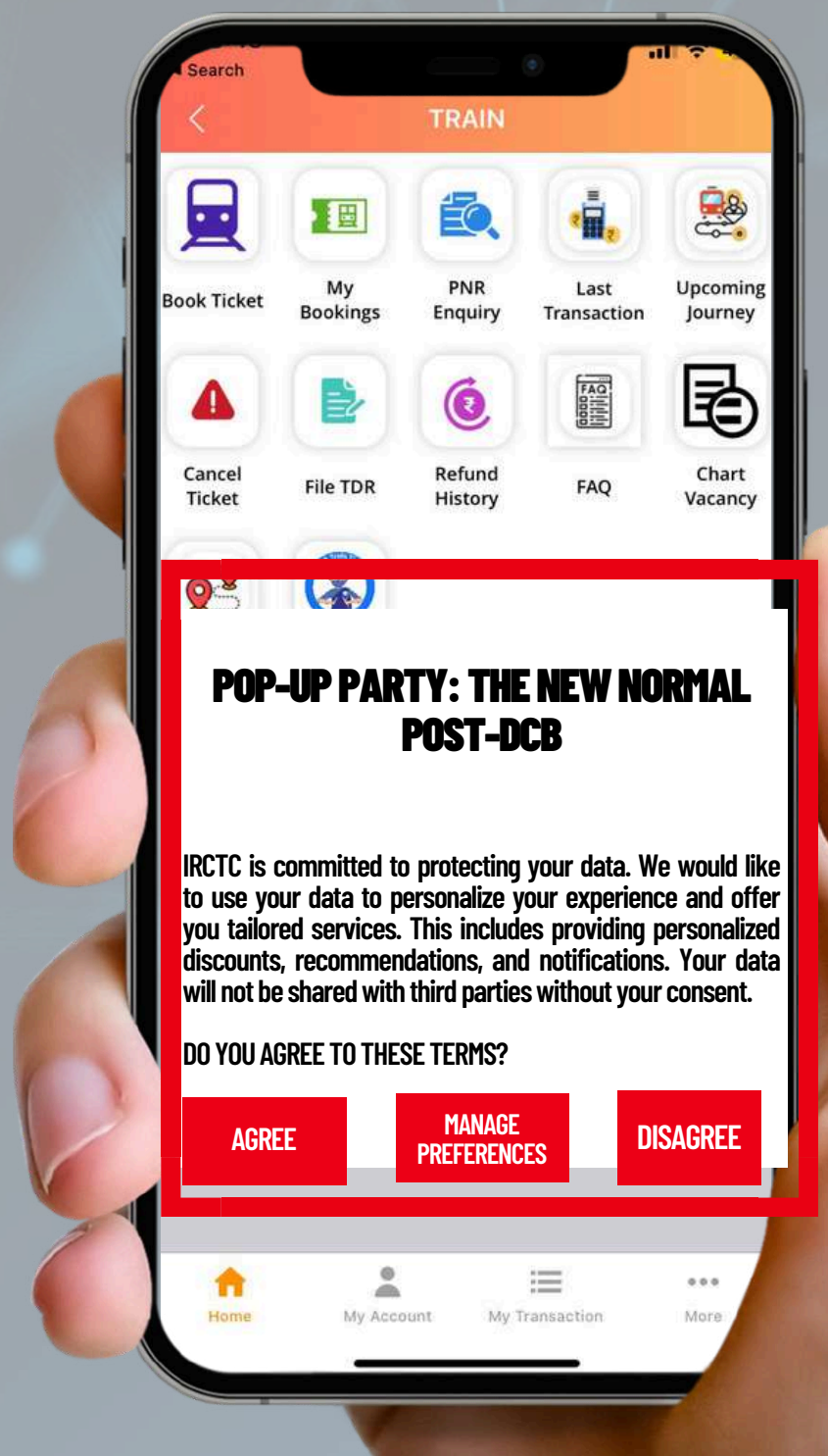
Moreover, this unbundling process may result in the loss of personalized, cross-service recommendations that users previously enjoyed. It could also increase the time and effort required to complete transactions. As a consequence, there is a possibility of decreased user engagement and reduced usage of the IRCTC platform.

CONSENT POP-UPS

PRE DCB



POST DCB



Pre-DCB:

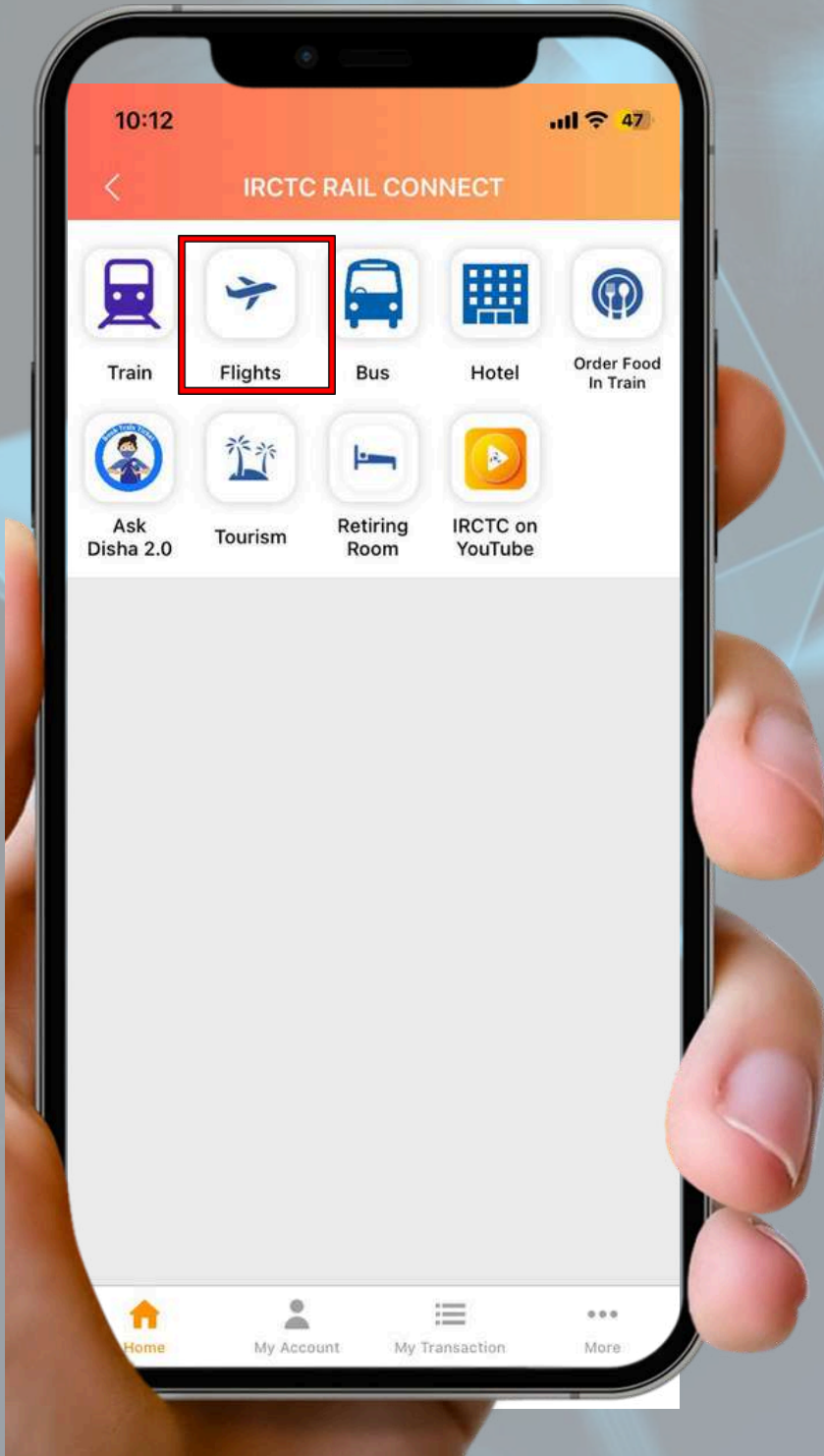
During the pre-DCB period, the user enjoys a hassle-free experience while using the application. Upon opening the IRCTC app, the user gains immediate access to the homepage without encountering any consent pop-ups. This convenience can be observed in the Pre DCB image, where the user can seamlessly navigate through the app's features.

Post DCB:

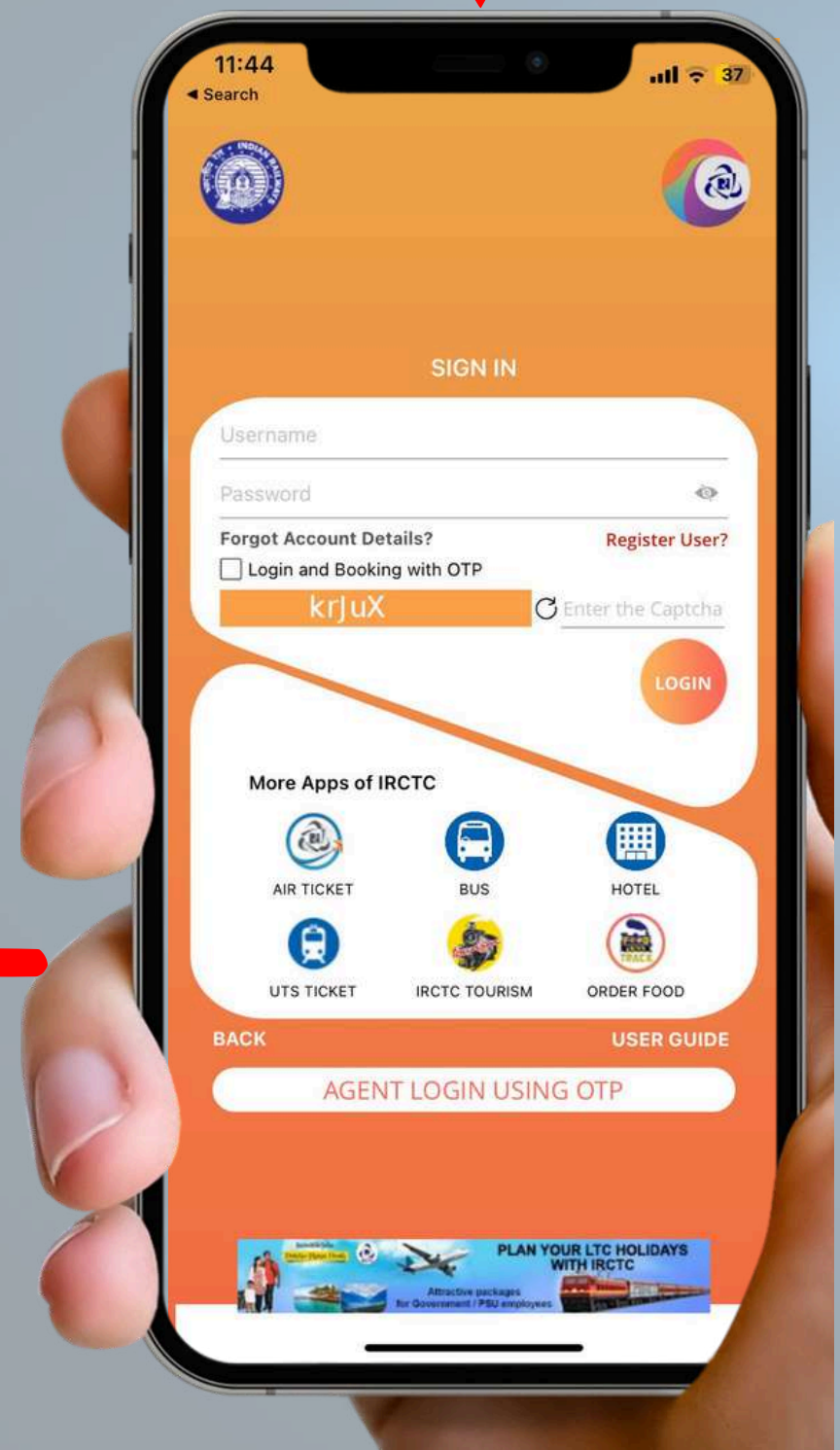
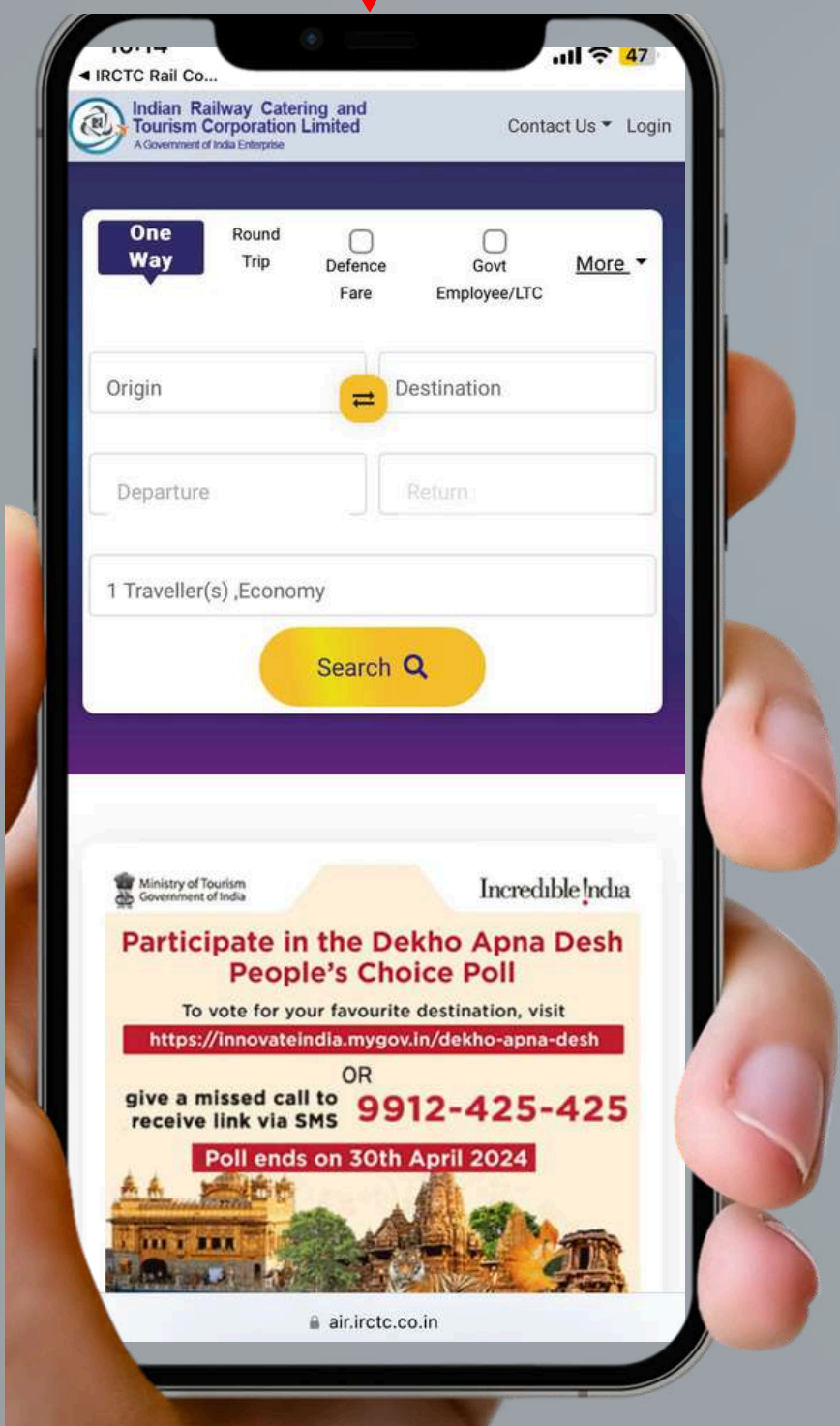
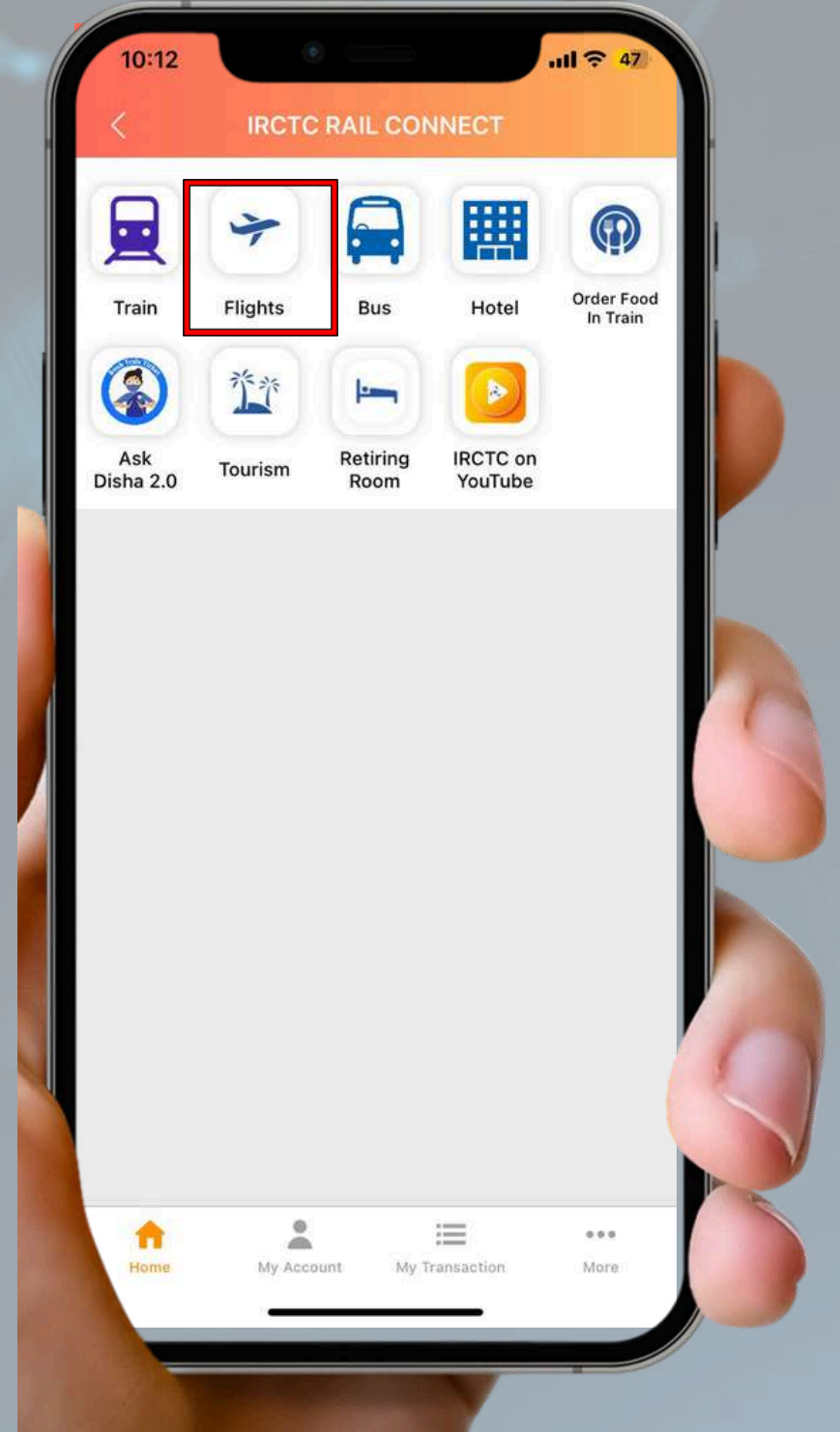
In the post-DCB era, users may encounter an increased frequency of pop-ups or notifications that explicitly request consent for data usage. (Article 12(2) of DCB) This heightened presence of consent pop-ups has the potential to disrupt the user experience. The impact of these changes can be visualized in the Post DCB scenario image, where the user encounters a consent pop-up before accessing the application.

SEAMLESSNESS

PRE DCB



POST DCB



Pre- DCB:

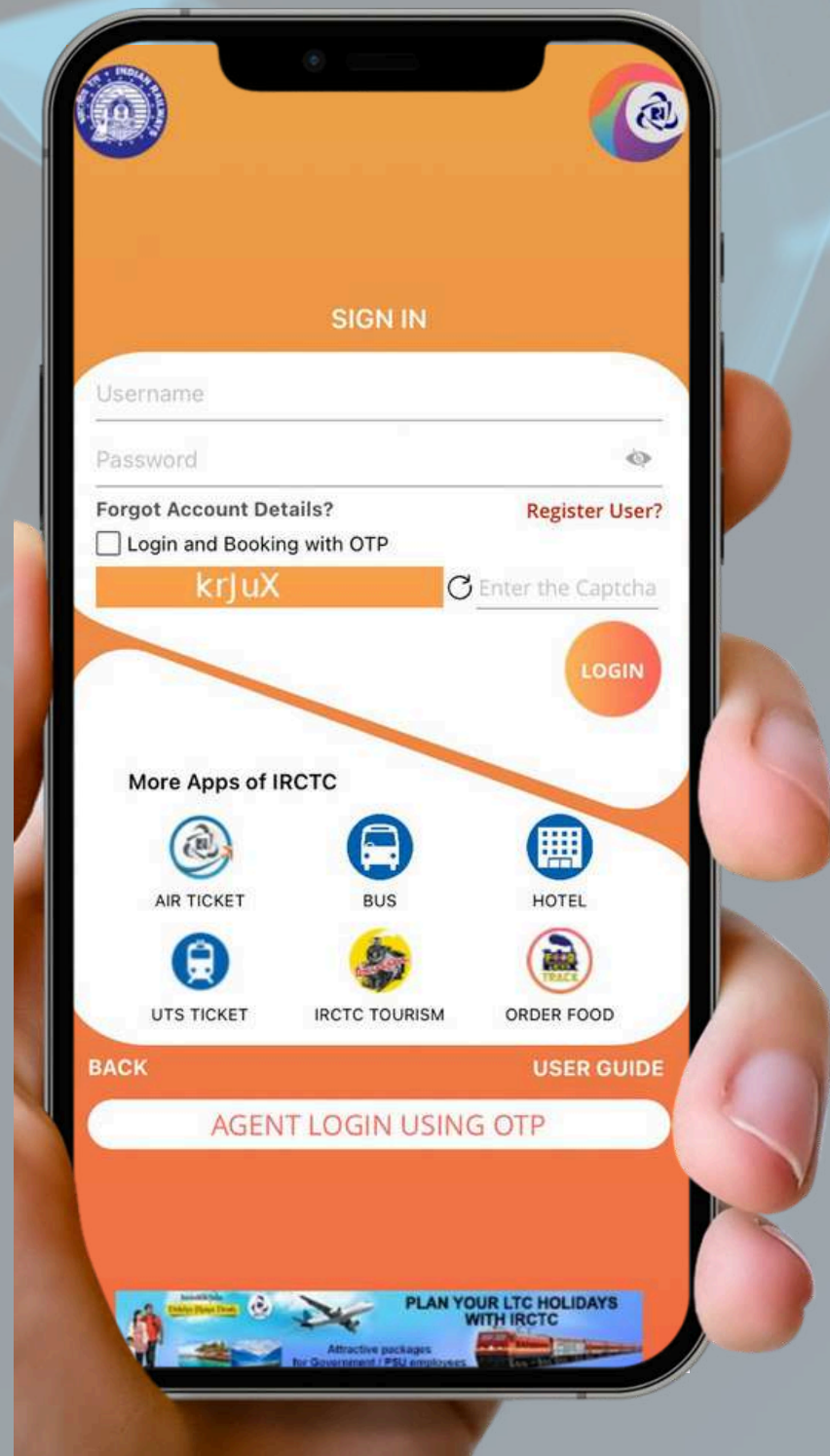
In the pre-DCB scenario, users had the convenience of directly engaging in conversations with “Disha 2.0” or booking the flight tickets on IRCTC application . This interaction was a straightforward process, involving a single step of clicking feature. Subsequently, users could have direct conversations with Disha 2.0 or book the flight tickets within the single application itself.

Post DCB:

In the post-DCB scenario, a notable change occurs in the process, introducing an additional step for users. This introduces an extra step in the process, as observed in the scenario described above. Moreover, this alteration significantly impacts the user experience, particularly in terms of the smoothness and seamlessness of the application.

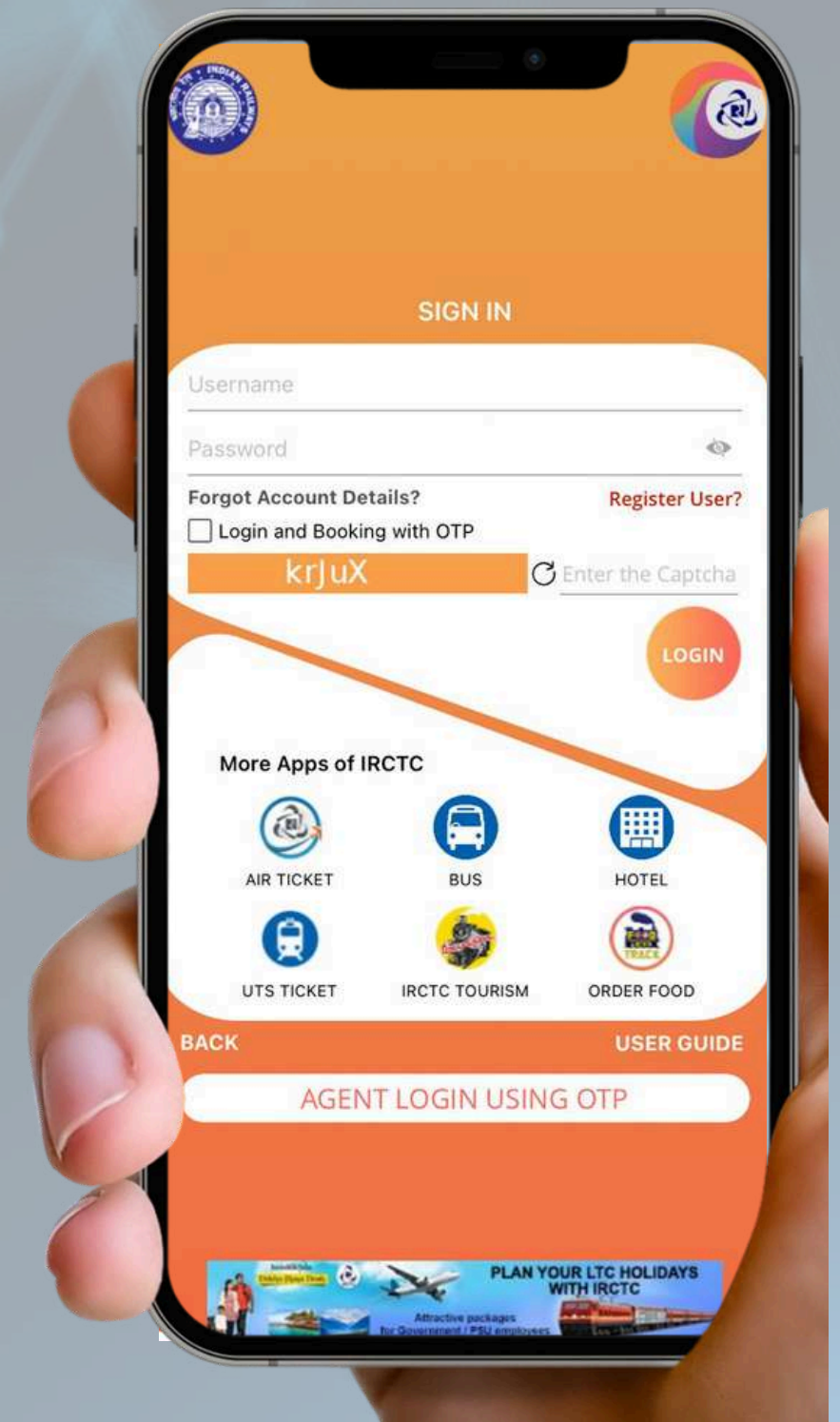
MANUAL INPUT REQUIREMENT

PRE DCB

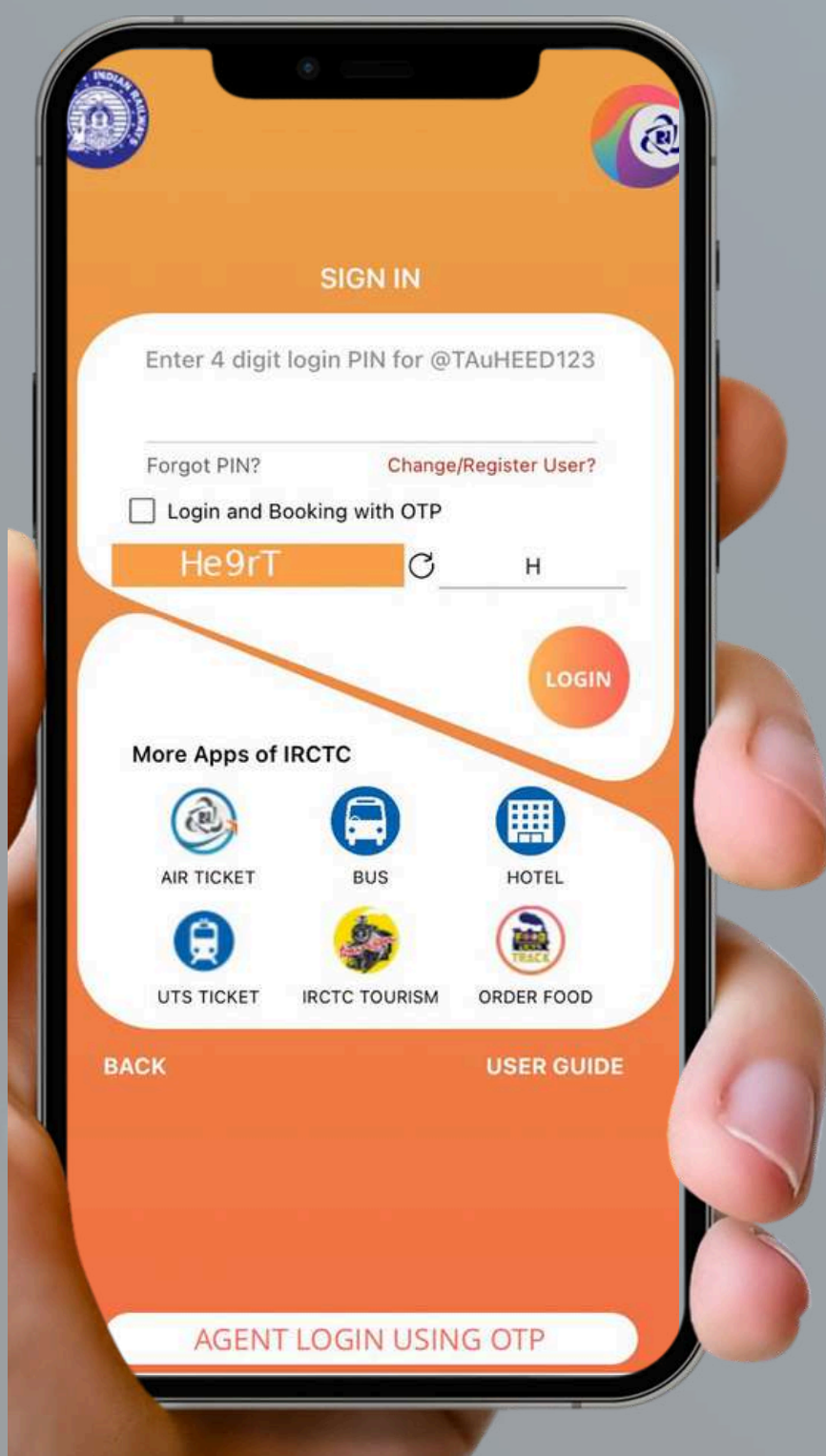


Once you have inserted username and password. There is no need to add information again. Only 4 digit pin is required.

POST DCB



Post DCB each time you have to insert username and password



Pre-DCB:

Before the implementation of the DCB, IRCTC users enjoy easy login. Once user register with username and password, they do not have to enter details each time for using the application, only 4 digit pin is required.

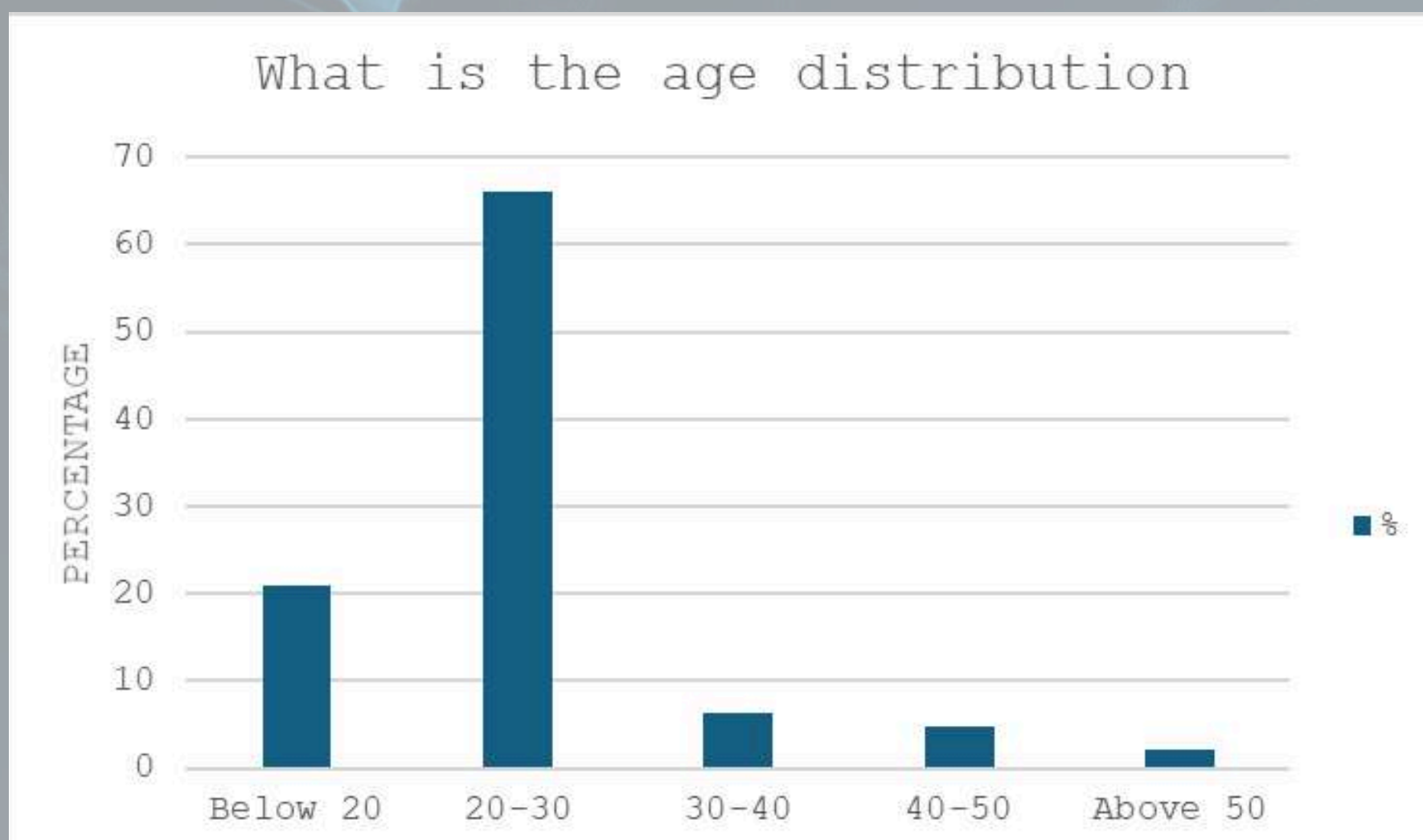
Post DCB:

With the regulations put forth by the DCB, there might be changes in the way platforms use consumer data. The SSDE's have to obtain consent of end users or business users to intermix or cross use the personal data collected from different services including Core Digital Service (Article 12(2) of the DCB). One potential change could involve users being prompted to manually input their credentials while availing of different services on the same platform. The need for additional manual data entry could potentially add extra steps to the user's app interaction process, affecting the ease and speed of their experience on the platform.

CHAPTER: 3

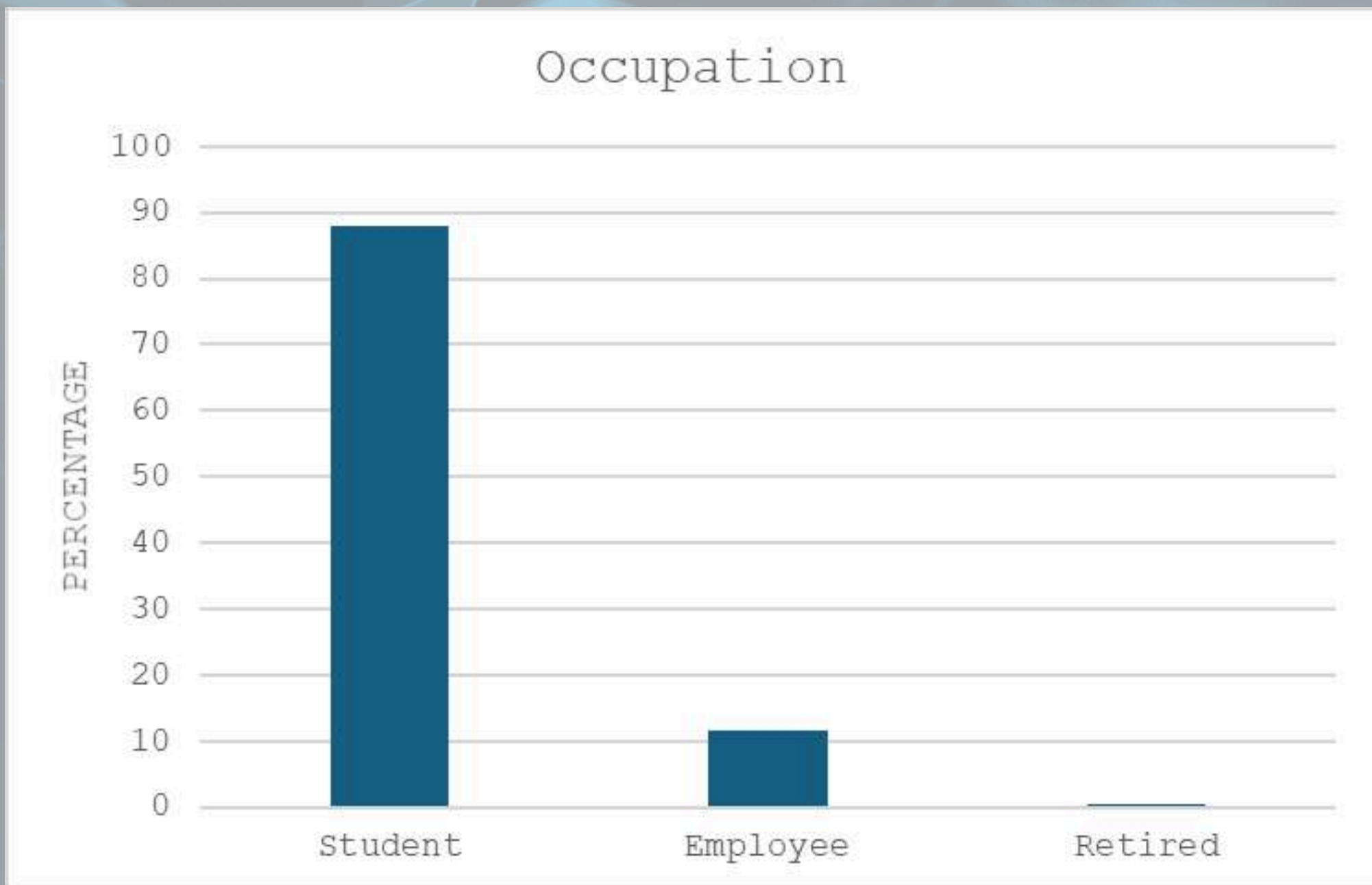
SURVEY RESULTS

What is your age?



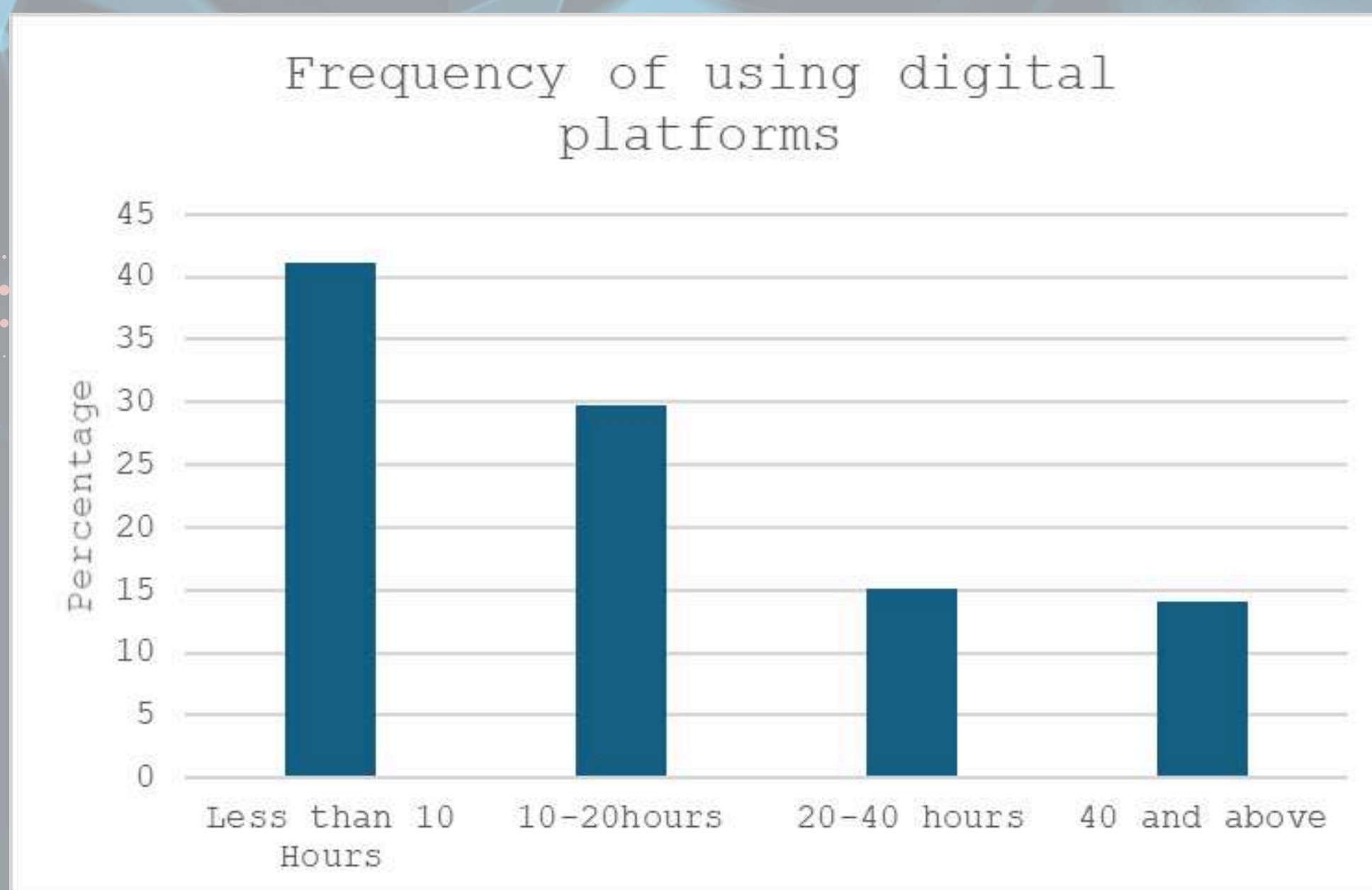
More than 70% of the respondents were less than 30 years of age. Rest 30% were aged above 30.

What is your occupation?



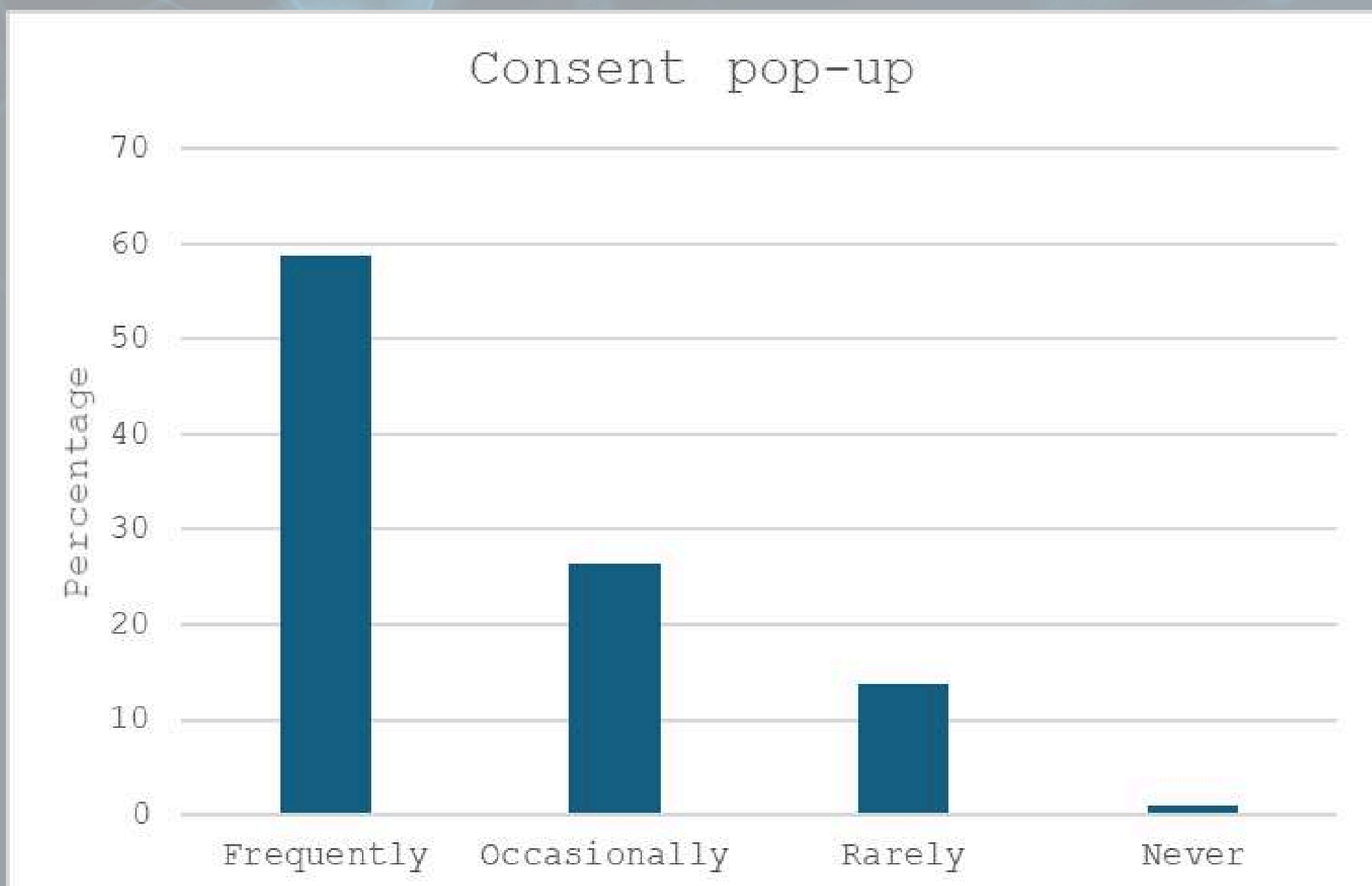
Almost 88% of the respondents were students and rest of the respondents were employees.

How frequently do you use digital platforms in a week (e.g., shopping, financial, communication apps)?



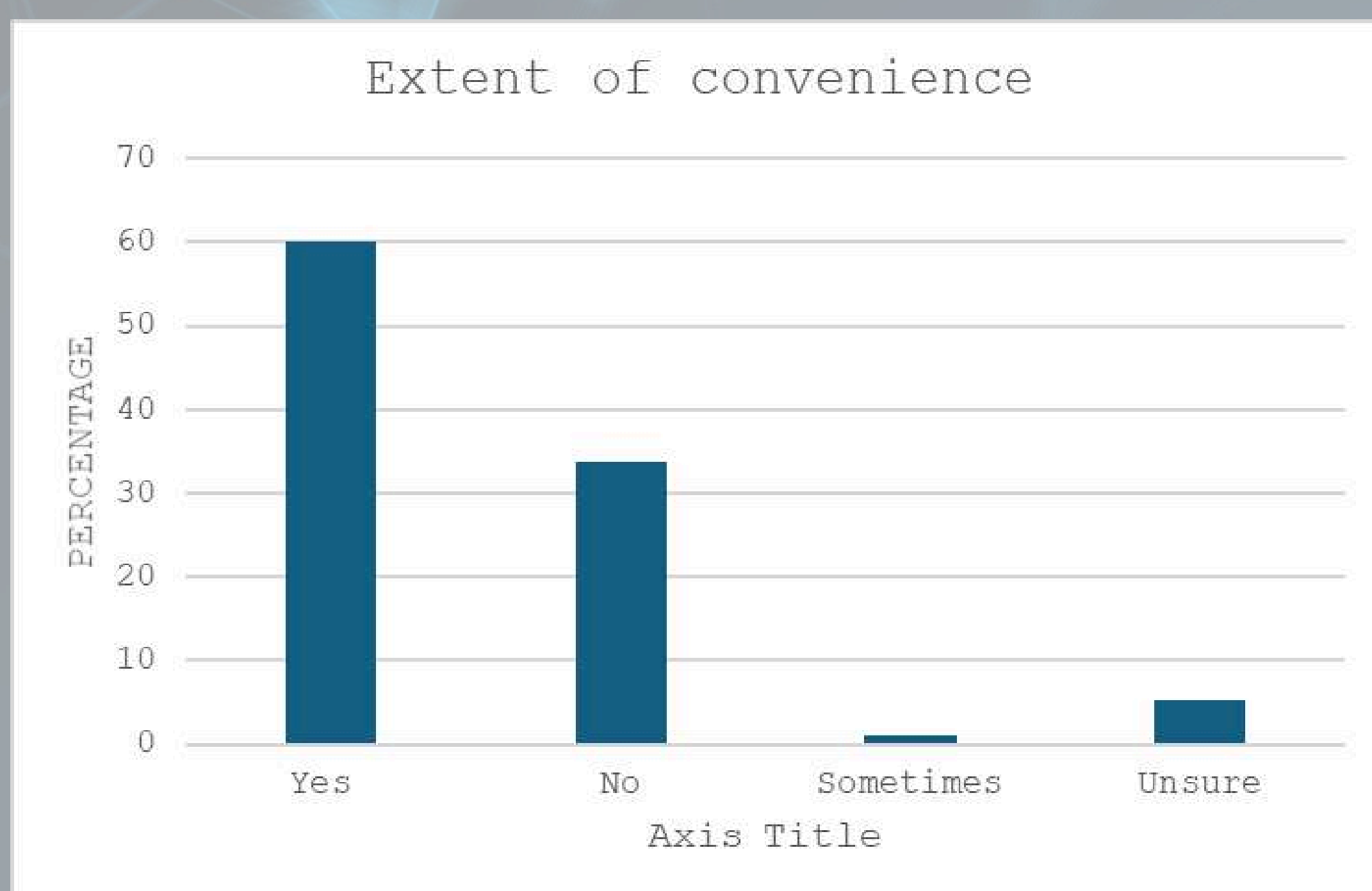
Approximately 70% of the respondents use the applications for 2 hours on daily basis.

How often have you experienced pop-up requests seeking consent for data usage when using Apps?



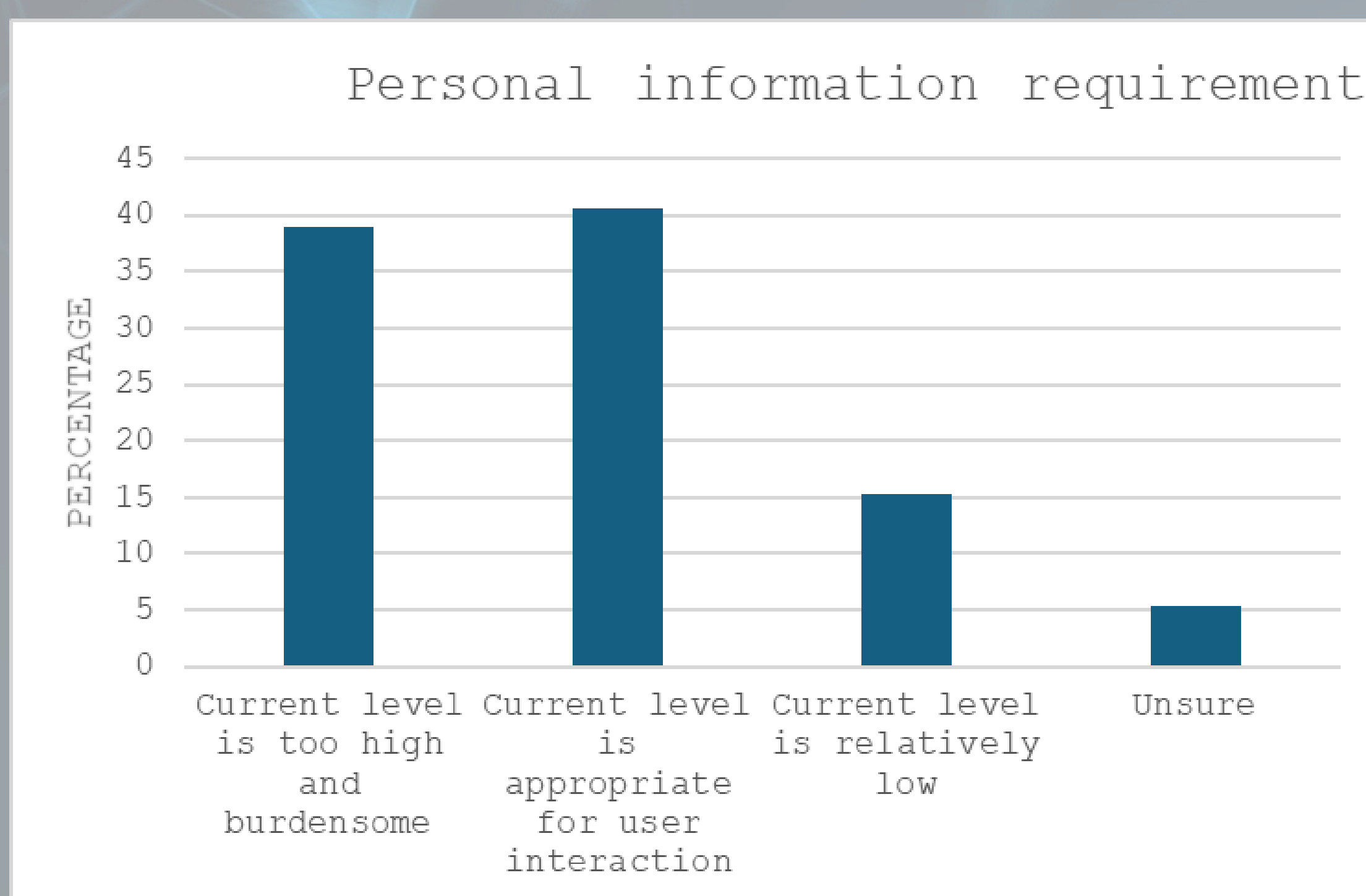
59% of the respondents received consent data on frequent basis from the websites/ applications they visit. Rest 39% received consent data on occasional or rare basis.

Would you feel inconvenienced if you had to give consent for data usage on a regular basis for personalized services?



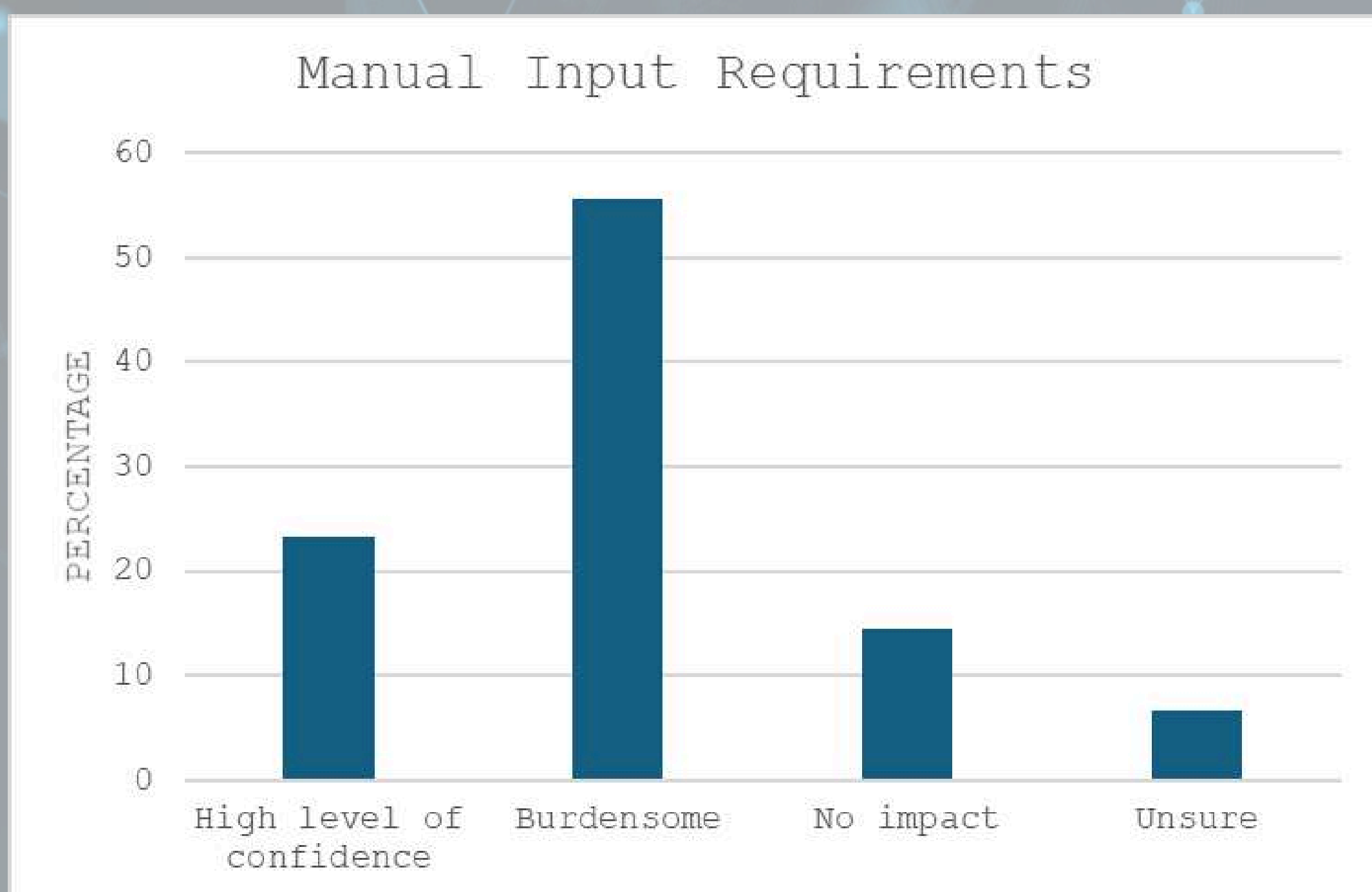
Approximately 60% of the respondents feel the inconvenience in using the applications if consent pop-ups frequency were to increase

While accessing an app you are asked to provide information such as location, personal information etc. How do you perceive the current level of personal information requirement?



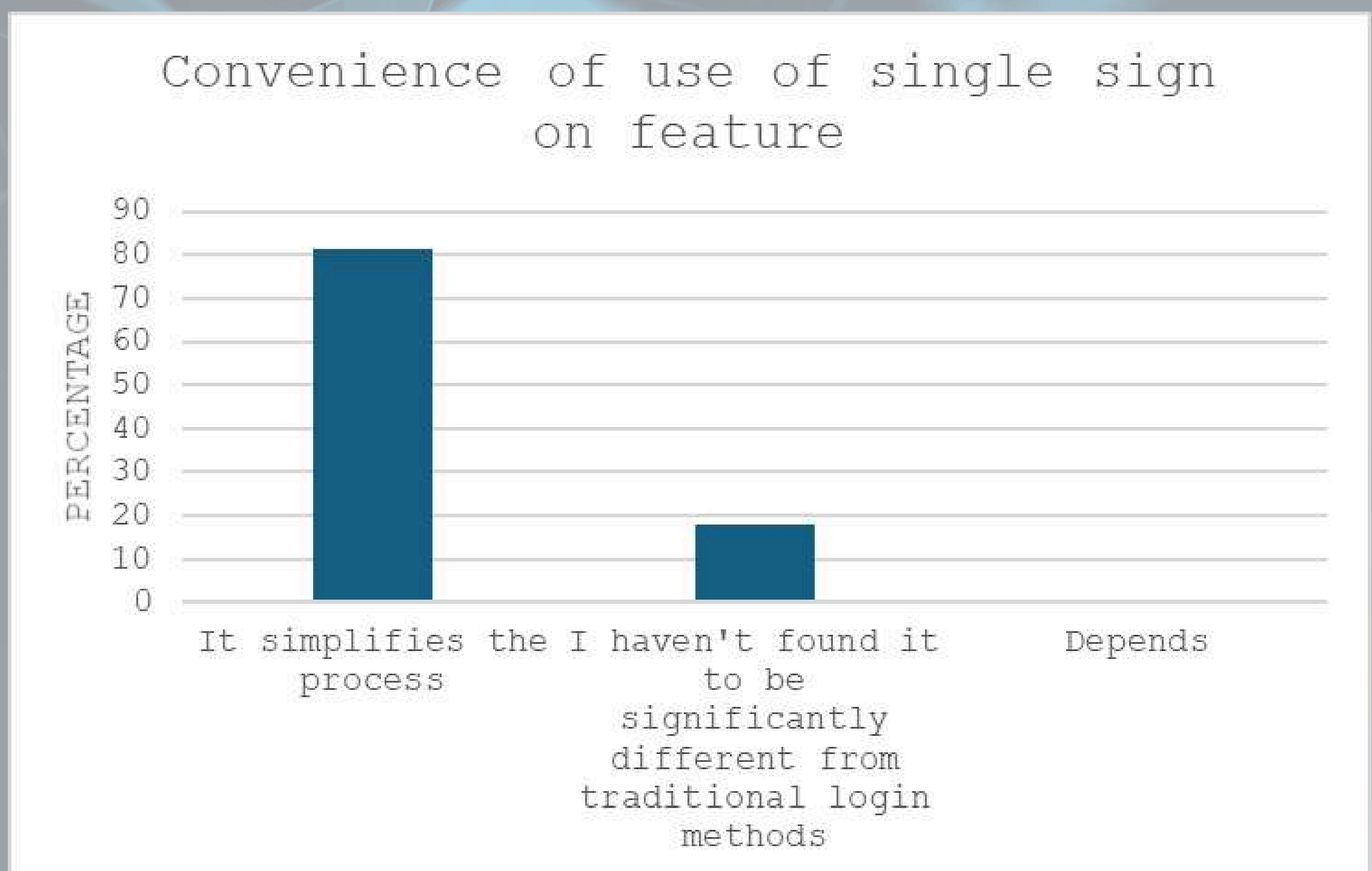
38% of the respondents believe that the current level of personal information taken by the application is too high and burdensome to insert while 33% of the respondents consider it to be appropriate.

How would you feel if you have to manually insert your information each time you use the application?



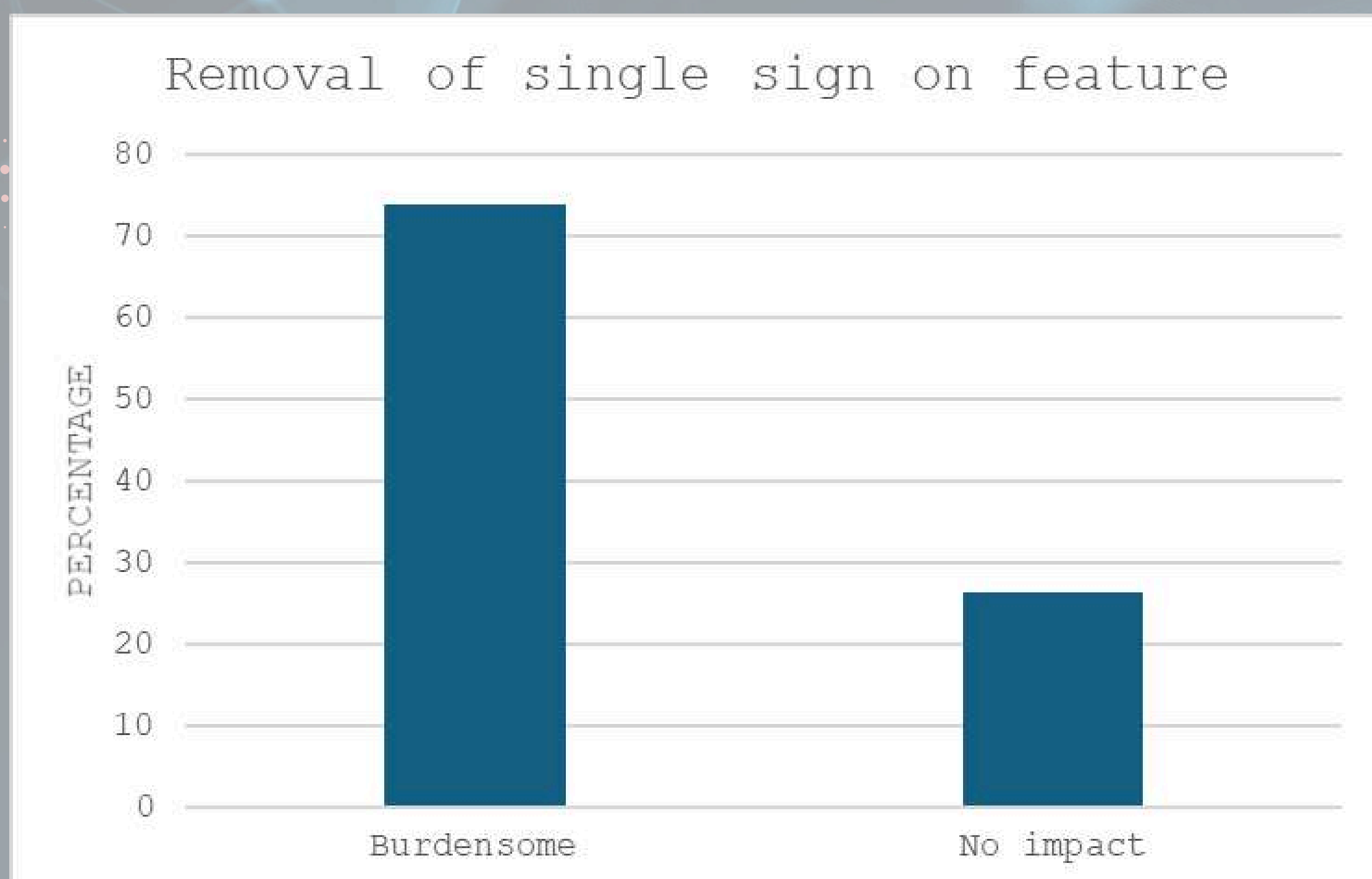
Approximately 50% of the respondents feel that it will be burdensome to insert personal information each time they use the application and 25% feel that it will increase their confidence

How would you describe your experience with the single sign-on feature in terms of convenience and ease of use?



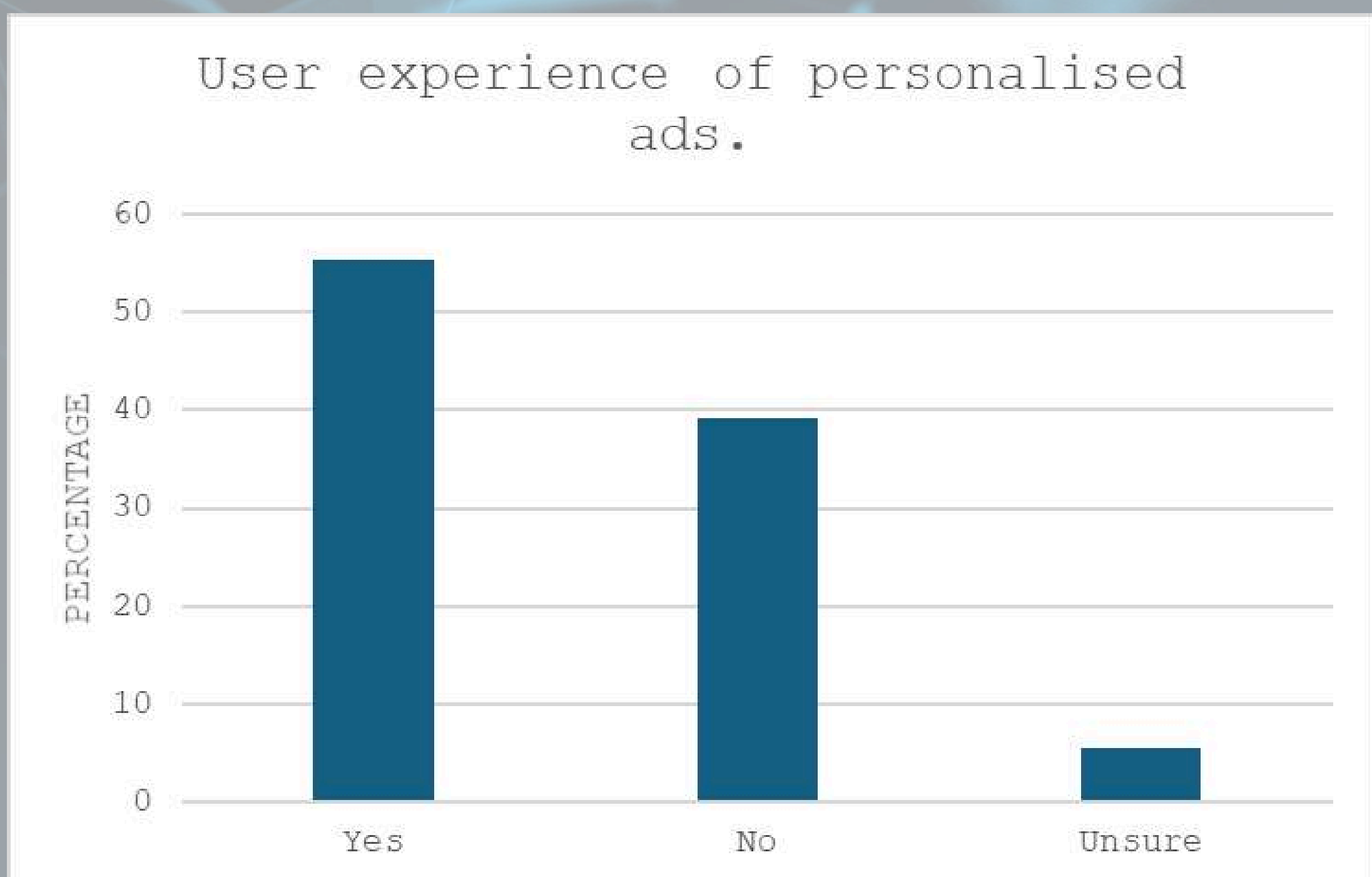
81% of the respondents feel that the single sign on feature simplifies the process of using the application and make the user experience seamless

How would using the Application change if the single sign-on feature was removed?



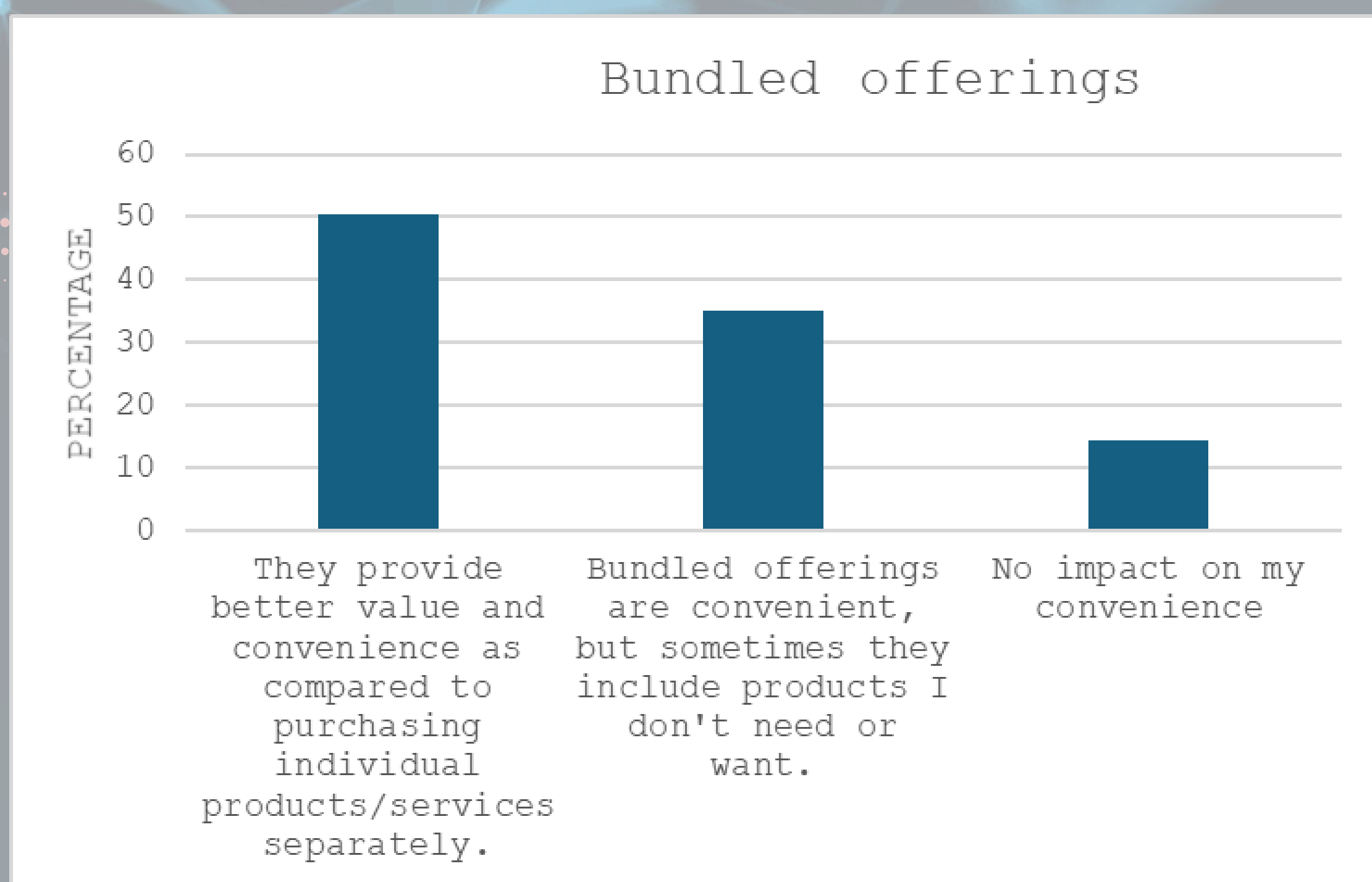
Approximately 74% of the respondents believe that if single sign on feature is removed, it will make the usage of application more burdensome.

Do you feel these personalized advertisements or recommendations enhance your user experience?



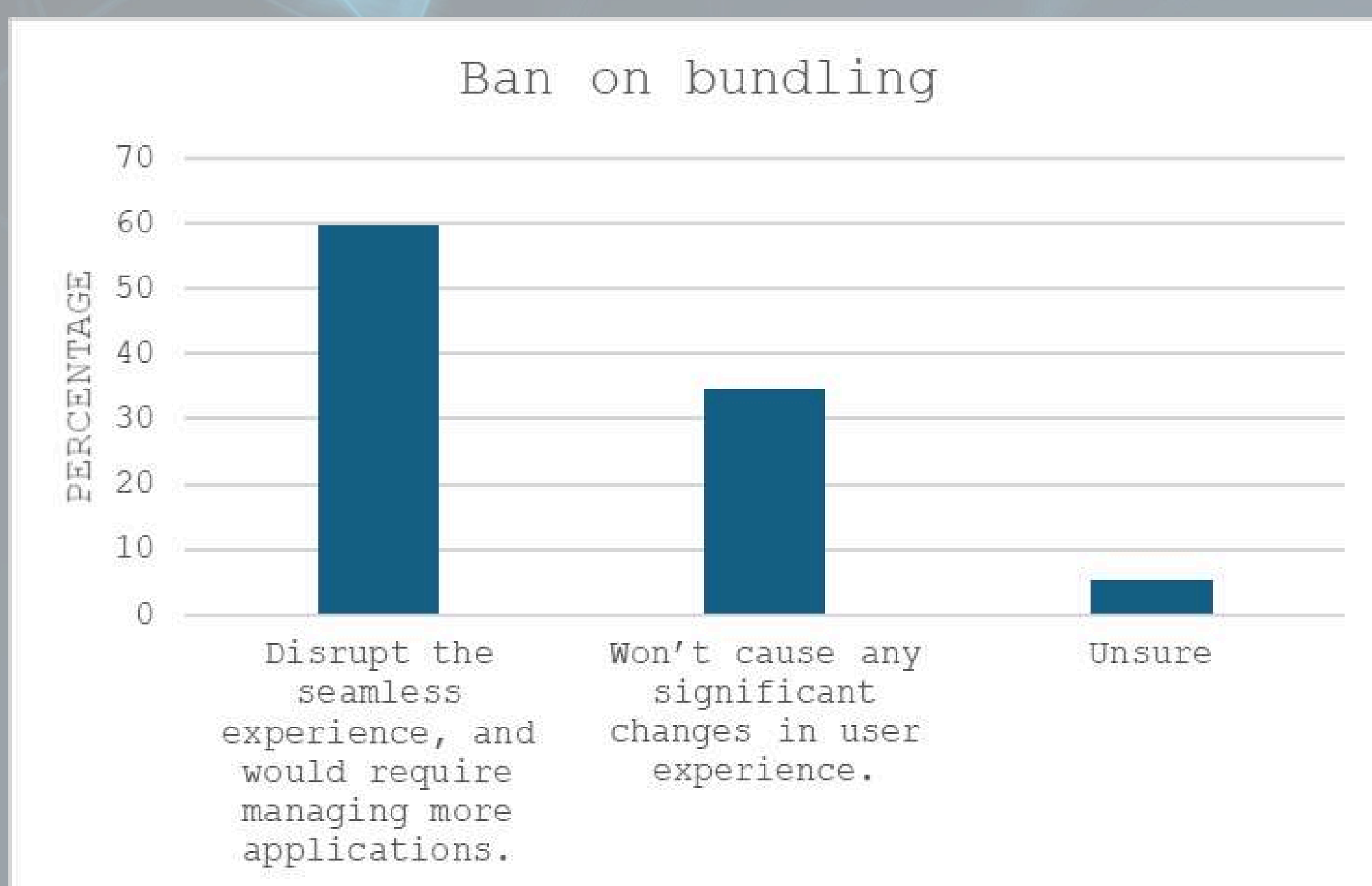
55% of the respondents believe that their user experience is enhanced due to the personalised ads and approximately 39% of the respondents feel that personalised ads do not enhance their user experience.

How do you perceive bundled offerings (different products together at place) in terms of providing value and convenience to consumers?



Approximately 50% of the respondents believe that bundled offerings are convenient. 14% of the respondents believe that bundled offers have no impact on their convenience

How would your experience with the Application change if the range of services previously bundled together is now separated?



60% of the respondents feel that if the bundled products get separated it will disrupt the seamless experience and it would be time consuming to manage the applications.

Company	Group	Core digital service	Meeting/Approaching the threshold criteria	Indian Turnover			Global turnover				Gross merchandise value			Global market capitalisation				End users			Business users				
				2021-22	2022-23	2023-24	2021-22	2022-23	2023-24	2021-22	2022-23	2023-24	2021-22	2022-23	2023-24	2021-22	2022-23	2023-24	2021-22	2022-23	2023-24	2021-22	2022-23	2023-24	
Horstar	Star India Private Ltd	Online video streaming	Meeting		20,699												3.2 B US\$				61.3 million	37.6 million.			
MX Player	Times Internet	Online video streaming	Not meeting	1200	1313																	300 million			
Zomato	Zomato Bundl Technologies Private Limited	online food delivery	Meeting	4687.3	7760.9																	58 million			
Swiggy	Swiggy Private Limited	online food delivery	Meeting	6119.8																					
MakemyTrip	MakemyTrip	Online travel booking	Meeting				303.92	593.04		26158	53841											68 million			
Flipkart	Flipkart Pvt Ltd	e-commerce platform	Meeting	51,176	56013																	400 million			
Meesho	Fashnear Technologies Private Limited.	e-commerce platform	Meeting		5735																	120 million			
Mynta	Flipkart Group	e-commerce platform	Meeting	51,176	56013																	60 million			
Ajo	Reliance Retail	e-commerce platform	Meeting		260000					16702															
Pharmeasy	API Holdings Ltd	e-commerce platform	Meeting		6644					14351												25 million			
Paytm	One97 Communications	Digital payments & Financial services	Meeting	4,974.20	7,990.30					850000	1E+06											9.2 crore monthly active users			
Ola (ANI Technologies)	ANI Technologies Ltd	Ride-hailing platform	Not meeting	1970	2799												2.65 billion US\$								
BookmyShow	Bigtree Entertainment Pvt. Ltd	Ticketing aggregator	Not meeting	277	976																				
Bharat Matrimony	Matrimony.com Ltd	Online matrimonial service	Not meeting	450,86	476,69												1309 crore				0.89 million	0.99 million			
Zepto	Zepto	Quick-commerce platform	Not meeting		2024																	13 million monthly active users			
Blinkit	Zomato	Quick-commerce platform	Not meeting	4687.3	7760.9					1482 (Q2-23)												20 million monthly active users			
Nykaa	Nykaa	e-commerce platform	Meeting		5143.8					9743.3												24 million			
CarDekho	CarDekho	Car-search platform	Not meeting	1600	2331																	62 million monthly active users			
Snapdeal	AceVector Group	e-commerce platform	Not meeting		388																	25 million monthly active users			
Jio Saavn	Reliance Industries Limited	music streaming platform	Meeting	9,74,864																					
Info Edge (Maukri.com)	Info Edge (India) Limited	Job Search Platform	Not meeting	1589	2345																				
MapMyIndia	MapMyIndia	IoT	Not meeting	200.4	281.4																				
IRCTC	IRCTC	Railway-ticketing platform	Meeting	1954.48	3661.9	4245											45840 crore INR				8.03 crore	9.14 crore			

* FOR FY24, IRCTC'S TOTAL REVENUE IS ITS PROJECTED REVENUE

