Sampling planning. The sampling plan employs a combination of incidental sampling, where invitations are extended to a broad group of participants, and snowball sampling, encouraging participants to invite colleagues or partners from their professional networks. This approach is adopted to ensure a diverse and representative sample of technology professionals involved in initiatives related to Smart Cities in Brazil.

To this end, the following specification form has been modified.

Identification Characterization Questions (CQ).

CQ1 - How old are you?

CQ2 - What is your city?

CQ3 - What is your status?

CQ4 - What is your level of education?

CQ5 - What is your background?

CQ6 - What is your main occupation?

CQ7 - In what sphere do you operate?

CQ8 - What is your gender?

CQ9 - What is your experience with smart cities?

Probing Questions (SQ)

SQ1 - Which of the urban categories below does your city best fit into? (delimit the number of inhabitants)

( ) Large Centers (More than 1 million inhabitants)

( ) Medium-Sized Cities (Between 100 thousand and 1 million inhabitants)

( ) Small Cities (Between 10 thousand and 100 thousand inhabitants)

( ) Rural Area (Less than 10 thousand inhabitants)

SQ2- In the context in which you are located, there is a more significant adoption of technologies related to Smart Cities in which of the following dimensions?

( ) Transport

( )Health

( ) Security

( ) Education

( )Energy

( ) Environment

( ) Other :

SQ3 - Within the implementations you know, which specific technologies are most prevalent?

( ) IoT (Internet of Things)

( ) Urban Monitoring Systems

( ) Renewable energy

( )Smart Mobility Technologies

( ) Big Data and Data Analysis

( ) Sensor Networks

( ) Others:

SQ4 - In your experience with Smart City technologies, which of the following devices are commonly used to access and interact with these technologies?

( ) Smartphones

( ) Pills

( ) Personal Computers (Desktops/Laptops)

( ) Smart Video Devices (e.g. Smart TVs)

( ) Wearable Devices (e.g. Smartwatches)

( ) Vehicle Navigation Systems

( ) Others:

SQ5 - What specific challenges do you identify in implementing Smart Cities technologies in your region related to Infrastructure and Connectivity?

( ) Lack of access to high-speed internet

( ) Scarce coverage of communication networks

( ) Limitations in electrical network infrastructure

( )None

( ) Other:

SQ6 - What specific challenges do you identify in implementing Smart Cities technologies in your region related to Technological Adoption?

( ) Community resistance to the adoption of new technologies

( ) Low digital literacy

( ) Difficulties in accessing technological devices

( ) Lack of initiative from universities and other technological centers

( )None

( ) Other:

SQ7 - What specific challenges do you identify in implementing Smart Cities technologies in your region related to Financial Resources?

( ) Budgetary limitations to implement advanced technologies

( ) Difficulty in accessing financing for Smart Cities projects

( ) High maintenance cost of implemented technologies

( )None

( ) Other:

SQ8 - What specific challenges do you identify in implementing Smart Cities technologies in your region related to Sustainable Energy?

( ) Limitations on access to renewable energy sources

( ) Lack of awareness about sustainable practices

( ) Difficulties in implementing clean energy solutions

( )None

( ) Other:

SQ9 - What specific challenges do you identify in implementing Smart Cities technologies in your region related to Education and Training?

( ) Lack of educational programs on modern technologies

( ) Difficulties in training local professionals

( )None

( ) Other:

SQ10 - What specific challenges do you identify in implementing Smart Cities technologies in your region related to Data Management and Privacy?

( ) Concerns about data security and privacy

( ) Difficulties in ensuring the application of privacy policies

( ) Shortage of professionals specialized in data analysis and management

( )None

( ) Other: