# EAASI – a Gender and Diversity Sensitive Usability Evaluation Tool

# The TInnGO ‘EAASI’ Product Evaluation Template

## Introduction

This template is in three parts:

Part A ensures that the product is described with both text and images, and any links to source documents or websites.

Part B is a series of prompts for the evaluator to fill in, one for each ‘Indicator’ with an overall rating at the end of each section.

Part C is a Summary Evaluation

We have tried to provide all instructions on the form, with a worked example. It is a Word document – so we advise creating a copy, and then clearing or overtyping the worked example.

## Evaluator(s)

The tool can be used by independent evaluators, whose findings can then be brought together in a summary report, or it could be completed during a workshop with co-evaluators using one form between them.

If using several independent evaluators, give them each a copy, and they can add their name below. In some circumstances you could anonymise the names when the report is given back to the designers – such as Evaluator A, B C or as preferred.

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| --- | --- |
| Evaluator Name | *Dr Janet Saunders* |
| Affiliation | *CU* |

# Part A: Product Description

This section ensures that the product is defined, i.e., the ‘problem definition’ which should include details about the ‘scenario of use’ AND any key target users, (such may be available in a design brief), bearing in mind this is intended to be ‘inclusive design’. This serves two purposes:

1. As part of a design process, with designers completing the evaluation tool as a means of prompting thoughts about the TInnGO gender and diversity-smart mobility indicators

Or

1. For completion by an evaluator who has been asked to appraise a design or actual product in the marketplace – and using secondary sources such as marketing material or press articles to discover as much as they can about the design or product.

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| --- | --- |
| **Product Description**  | Type your answers below – a worked example is provided  |
| **Name of product or brief summary if it doesn’t have a Name** | *e.g. an e-scooter for a shared hire scheme* |
| **Source organisation or design source** | *e.g. Coventry University Student Designer for TInnGO Open Innovation Platform* |
| **Product Goal / problem definition/ purpose / USP** *Describe briefly what the product is for, who it is for, what problem it solves. (This can be developed further in the following questions)* | *e.g. A speedy and low effort way for Adults without children to get around a city**Reduces the need for users to drive a car, increases active travel, and shared transport.**The user accesses the scooter from a central hub, and can return it to a number of docking areas.*  |
| **What part of this product are you evaluating?** *Be specific about what is being evaluated, e.g. if this is a vehicle – is it only the interior, or does this include the exterior also. Is there a service design component?* | *e.g. Just the e-scooter itself,* ***not*** *the service model or the means of accessing it.* |
| **Is a design brief available?** *If Yes, please attach it or provide a link* | *e.g. No, several schemes exist already* |
| **Do we know anything about the design process?** *Was there any co-creation or user involvement? Were diverse groups included?* | *e.g. The design was co-created by students and staff with a mix of gender/age, but no other groups were consulted*  |
| **User groups, primary and secondary, plus others - may include the service provider or other people who may be affected or share space with the product** | *e.g. Primary: A person (any gender) who needs or prefers a speedy way of getting around the city without walking; persons commuting from train station or car park on city perimeter to another destination within the city.* *Secondary: persons visiting the city for leisure or light shopping;**Tertiary – scooter company/ council employees collecting the e-scooter from a docking hub and maintaining / or cleaning them between users; Fourth – other pedestrians and road users* |
| **Task Context***Describe any specific task requirements, think about e.g. the street environment, time of day, lighting, weather, user luggage needs, journey distances…*  | *e.g. could be used during the day or at night under street lighting, for short distances around the city centre, sharing space with pedestrians**Users may have bags and/or handbags and/or commuter backpacks* |
| **User needs***Describe any specific user requirements* | *e.g. The e-scooter will be used by as wide a range of users as possible, aged 16 or over, different weights and types of footwear will need to be accommodated, they may be first-time scooter users. Safety is an important factor for all users, as well as other pedestrians and road traffic* |
| **Images of the product***Paste one or more images of the product into the column on the right, up to 3 is suggested* | *Image 1 – main image* |
|  | *Image 2 – additional image* |
|  | *Image 3 – additional image* |

# Part B: EAASI Indicators

The following sections consider the product in terms of each of the TInnGO ‘Gender and Diversity Smart Indicators’, which are briefly explained at the start of each section. Working through each indicator has 4 steps – goal setting; evaluating; evaluating for user groups; overall evaluation.

## **Indicator 1: Effective: Does it deliver what it promises? Does it produce the intended result from the perspective of both user and provider?**

‘Effectiveness’ means how far does the product produce the intended result for both user and provider. It requires thinking about the ‘user task’, as defined in the initial assessment of goals for the product, and the provider goals, and assessing whether the desired end result would be achieved.

For TInnGO, ‘Effectiveness’ ALSO means thinking about the user task from the point of view of a range of users, and women in particular. In relation to gender dimensions, it’s important to remember that ‘single trips’ are more often made by men, while women tend to make more multiple trips and ‘chained trips’ for different purposes – e.g. dropping children off at care, school, picking up groceries on way to/ from work. Other kinds of trip chaining could apply to either gender – visiting a gym or swimming pool after work for example, but we have learned that women typically do more chained trips. Travel purposes vary immensely across group intersections: to work, care, medical appointments, shopping, leisure.

### Step 1: Goals - The product has been designed to be effective in the following ways:

*Please complete the product goals per user groups.*

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| --- | --- |
| **User Group***(add target users AND other citizens who use the same city space)* | **How would it be effective for end users?** |
| Commuters / workers / tourists/ young people | The e-scooter should be measured in terms of how well it enables people to move speedily and safely around the city, without overly impacting the safety and convenience of others |
|  |  |
| Other groups of citizens | The e-scooter should not impinge on other’s enjoyment or safety in the city |
|  |  |
| **Providers***(complete as appropriate)* | **How would it be effective for providers?** |
| Local Councils | e.g. Local councils or civic authorities will need a solution that is easy to maintain and can be provided to people at the right place, right time, right quantity. |
| Charities | e.g. Not applicable |
| Businesses | e.g. Shared transport businesses can earn a profit from the number of riders  |

### Step 2: How well does it meet the ‘Effectiveness’ goals described above?

***Please complete using what information you have available from your design sources***

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| **Goal** | **Does it meet the goal?** |
| *Enable commuters, tourists, young able-bodied people move speedily around the city* | *e.g. Yes, for these users* |
| *Does not overly impact safety and enjoyment of others* | *e.g. Possible issues for safety, anxiety* |
| *Easy to maintain, adequate supply, can earn a profit* | *e.g. Need more investigation* |
| **‘Gender and Diversity Smart’ Effectiveness** |  |
| **Is it effective for commuters?** | *Yes – it provides a speedy solution within city from transport hub* |
| **Is it effective for leisure visitors?** | *Yes if on a single trip within city* |
| **Is it effective for single trips?** | *Yes* |
| **Is it effective for chained or multiple trips?**  | *Unlikely. Only if it can be parked and returned to, or hired for the whole trip*  |
| **Is it effective for care related trips travelling with children or a dependent adult? E.g. to nursery, day-care, hospitals, schools?** | *No – it is one person use only* |
| **Is it effective for trips with luggage or shopping?** | *Only with a rucksack – other types of baggage are poorly accommodated* |
| **Does it impinge on others enjoyment or perceptions of safety in the city?** | *Yes it does where shared pavements are used* |

###  Step 3: Effectiveness for Social groups and Providers – consider needs and intersections where relevant – some could be left blank

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| **Group** | **Score percentage** | **‘Effectiveness’ considerations** |
| Work commuters | 100 | *Very effective if they have a backpack* |
| Leisure / off peak travellers | 100 | *Very effective if they have a backpack* |
| Women in general | 70 | *Use may be dependent on shoes and clothing* |
| Women or others making multiple / chained trips | 0 | *Not effective for trip chaining* |
| Adults travelling with dependent children or carers | NA | *Not effective* |
| Low income groups, people on welfare | 50 | *Low cost hire could reduce need to own a vehicle* |
| Young people and students | 50 | *Ditto* |
| School-children travelling independently | NA | *Not applicable* |
| Older people | 0 | *Unlikely to use* |
| People with disabilities, physical or cognitive | ? | *Unlikely to be useful* |
| People travelling from or to remote locations | ? | *Not known* |
| Minority ethnic groups | 50 | *Could be cultural disincentives* |
| People feeling vulnerable in public spaces | 50 | *Not known – some could find it a benefit to move faster than walking* |
| Transport Providers | 50 | *Will depend on business model* |
| **Conclusions (Total % / n of applicable groups)** | **43%** | ***Very effective for some users, but excludes others*** |

### Step 4: Effectiveness: Overall Evaluation

|  |  |
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|  | **Please summarise based on the comments and evaluations above** |
| **Effective for who? Is it effective for the citizens it is aimed at?** | *e.g. The e-scooter is very effective for the able bodied commuters and tourists it is aimed at.**e.g. Providers may find it an effective means of providing shared active travel, businesses who provide it may find it an effective source of profit**Many other citizens would be excluded however* |
| **Not Effective for who?** | e.g.*Women may be deterred from use due to their ‘office’ clothing or footwear. It is not effective for trip chaining or with dependents, or anyone carrying shopping. People with physical or cognitive disabilities will be excluded, people on low incomes may consider the cost too high.* *The impacts on pedestrians will reduce safety and comfort. Congested pavements may pose safety issues, and reduce the effectiveness of the scooter.* *Local authorities may consider the impacts on ‘other citizens’ too high for this to be effective as a solution*  |
| **Percentage Score** | **43%** |
| Copy a smiley to give your overall impression  | A yellow smiley face  Description automatically generated with medium confidence |

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| Excellent (70 to100%) | Good (60-69%) | Satisfactory (50-59%)  | Poor (40-49%) | Fails this indicator (0-39%) |
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Key:

**Indicator 2. Attractive – appealing in terms of implementation, use and benefit from both provider and user perspective**

‘Attractive’ Mobility is set within the context of providing safe and accessible solutions for a broad and diverse range of people. It includes how far ‘the solution’ can be customised and made comfortable, and factors such as clean, safe and convenient. There should be scope here to consider attractiveness according to age, gender and other factors such as social grouping, ethnicity, personality. Also consider the impact on, and of, surrounding areas such as bus stops, hubs, rail stations. How is the artefact adaptable to users’ needs and wishes? Note: With adaptability, there is some overlap with the criteria of ‘Inclusive’ (discussed later) where adaptability and accessibility can be commented on in more detail.

### Step 1: Goals: The product has been designed to be attractive in the following ways:

**Please complete below how the product has been designed to be attractive for users and providers.**

|  |  |
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| **Target user group***(complete as appropriate)* | **How will it be attractive to end users?** |
| Commuters / workers | *e.g. The solution provides a speedy way to get around city locations or from a transport hub/ park & ride to place of work* |
| Tourists | *As above* |
| Young people | *e.g. The product can be perceived as a ‘fun’ way to get around the city, if pick up and drop off are conveniently located, especially as users may not own cars and are likely to be arriving by train or bus from outside the city* |
|  |  |
| **Providers***(complete as appropriate)* | **How will it be attractive to providers?** |
| Local Councils | *e.g. Local councils or civic authorities will be attracted to this because it offers across city individual transport on demand, and will reduce the need for car driving and parking inside the city. It increases ‘Active Travel’ options, a goal for population fitness. It also is in keeping with the ethos of a ‘modern’ city. There could be a profit-sharing model with a third party provider.* |
| Charities | *e.g. Not applicable* |
| Businesses | *e.g. Shared transport businesses can earn a profit from the number of riders*  |

### Step 2: How well does it meet ‘Attractiveness’ goals?

***Please complete using what information you have available from your design sources***

|  |  |
| --- | --- |
| **Attractiveness Goal** | **Does it meet the goal?** |
| *Enable commuters, tourists, young able-bodied people to move speedily around the city, in a fun way* | *e.g. Yes, for these users, this is fun and appealing* |
| *Local Council’s and 3rd parties’ goals* | *e.g. Yes it does, however the impacts on other citizens may make it less attractive*  |

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| **Gender and Diversity Smart ‘Attractiveness’ questions** |  |
| **Safety:** Does it feel safe to a range of groups? E.g. waiting at stops, stations and deserted areasIs it safe to actually use? What are the safety issues?Are there safety issues for other transport users or pedestrians? | *e.g.**For riders a helmet may not be considered necessary or aesthetic, but from a safety perspective, helmets would improve personal safety in event of a collision. A helmet should be provided, but may make it seem less attractive to uses, and there are additional issues of hygiene and cleaning.**Safety issues include road crossings and navigating around other pavement / road users such as pedestrians, cyclists, both for the rider and the pedestrian or other road users (vehicles, cycles).**Many issues arise for other pedestrians in terms of safety when sharing space with e-scooters* |
| **Clean and Hygienic:**Can it be kept clean or cleaned for next user? | *e.g. The e-scooter could be cleaned between riders by an operative or cleaning facilities provided at docking points for riders to use themselves – this concept has become common during COVID with supermarket trolleys**Helmets present a further issue – riders can bring their own, otherwise these too must be cleaned.* |
| **Convenient:**Can it be accessed in a convenient location? | *e.g. This would be paramount to its success* |
| **Adaptability:**Is it adaptable to users of different sizes in weight and height? Can it be used in different ways e.g. Sit / stand?Is there any luggage storage? Is this information provided in the design?  | *e.g. –e-scooter handles need to accommodate different heights, the base must accommodate foot sizes, or footwear differences (open sandals, heels?)* *E-scooters might need a secure carrier for a handbag, shoulder bag or briefcase – not everyone uses a backpack – what about umbrellas or walking sticks?* |
| **Comfort:**Does it offer comfort? Is the design comfortable to hold / sit on or sit in? Are controls within reach for everyone?Consider shelter from elements, seating, waiting area, toilets? | *e.g. Hubs could have facilities and shelter – who wants a wet e-scooter? e.g. Handles could have a comfort pad, controls within reach of all*  |
| **Interest, Novelty and Usefulness:**Does it offer something interesting? Timetable information; entertainment; fun; local information; city event updates | *e.g. e-scooter may be a novelty, fun way to move around and is active travel, other things such as information could be provided at hubs or on Apps* |
|  |  |

Step 3: Attractiveness to Social groups and Providers – consider needs and intersections where relevant – some could be left blank

|  |  |  |
| --- | --- | --- |
| **Group** | **Score %** | **‘Attractiveness’ considerations** |
| Work commuters | *80* | *e.g. Yes would find attractive* |
| Leisure / off peak travellers | *80* | *Ditto* |
| Women in general | *50* | *Issues with safety, clothing, bags and physical strength might make this unattractive, younger women may find it appealing* |
| Women or others making multiple / chained trips | *0* | *Unlikely* |
| Adults travelling with dependent children or carers | *0* | *Not attractive* |
| Low income groups, people on welfare | *20* | *? depends on cost relative to alternatives, walking is cheaper* |
| Young people and students | *80* | *Likely to be attractive* |
| School-children travelling independently | *NA* | *Too young to use* |
| Older people | *5* | *Not attractive* |
| People with disabilities, physical or cognitive | *0* | *Not attractive* |
| People travelling from or to remote locations | *50* | *?* |
| Minority ethnic groups | *25* | *? Could be cultural inhibitors and perceived vulnerabilities* |
| People feeling vulnerable in public spaces | *10* | *May be attractive to some, due to speed and control* |
| Transport Providers | *40* | *An attractive solution at first sight, but public safety and objections from non-riders may outweigh the attractiveness* |
| **Conclusions (Total % / n of applicable groups)** | *34%* |  |

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### Step 4: Attractiveness: Overall Evaluation

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|  | **Please summarise based on the comments and evaluations above** |
| **Attractive to who?** | *e.g. Young people and fit commuters or similar tourists – these are the main groups it is designed for, so it meets those goals.* |
| **Not Attractive to who?** | e.g.*Women making chained trips**e.g. Women in general will find these less attractive due to issues with trip chaining, footwear, clothing and bags**e.g. Older people or people with limited physical abilities are not likely to find e-scooters attractive to use because of its physical demands**e.g. Other pedestrians have been shown to find the e-scooters unattractive because they fear collisions or injury to themselves, particularly users with reduced mobility for a variety of reasons including poor sight / hearing**The disadvantages may outweigh the advantages from a Provider’s point of view.* |
| **Percentage Score** | **34%** |
| Copy a smiley to give your overall impression  | A yellow smiley face  Description automatically generated with medium confidence |

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| Excellent (70 to100%) | Good (60-69%) | Satisfactory (50-59%)  | Poor (40-49%) | Fails this indicator (0-39%) |
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Key:

## **Indicator 3: Affordable – cost-effective in terms of acquisition/implementation and maintenance from both provider and user perspectives**

Does this transport solution contribute to ending transport ‘accessibility poverty’? This assesses whether people can reach their basic daily activities within a reasonable time, ease and cost – and relates to key activities that support life chances such as employment, education, health visits. (Lucas, 2016)

For the TInnGO project, this incudes affordability from the point of view of public transport – so the public investment of the provider must support a solution that will be used by a wide base of users. It can also be assessed from the point of view of Affordability for individuals. This can be very subjective – e.g. a taxi could be an everyday item for people with plenty of disposable income, but a luxury for those on lower incomes. If a transport solution is likely to be adopted, it needs to be ‘affordable’ for the majority of everyday citizens, *regardless of income* – otherwise it is not an equitable choice. It should be kept in mind that the gender pay gap means women have fewer economic resources than men.

Affordability for the transport provider, involves a discussion about investment and long-term goals, and it is important that designers consider this perspective. A distinction could be made between cost to the user of hiring/sharing or owning their own means of transport e.g. cycles. Public authorities can provide shared means of transport or facilities for parking of privately owned items. If hire vehicles are in a central hub, affordability of getting to the hub from an out-of-city location could also be considered.

### Step 1: The product has been designed to be affordable in the following ways:

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| --- | --- |
| **User Group***(complete as appropriate)* | **How is it affordable to end users?** |
| Commuters / workers / tourists/ young people | *e.g. This product is designed to be relatively cheap for all, depending on the way it is charged (no information available)* |
|  |  |
|  |  |
| **Providers***(complete as appropriate)* | **How is it affordable to providers?** |
| Local Councils | *e.g. Local councils or civic authorities will need to assess the affordability of provision for set-up costs, ongoing maintenance, stolen items. There could be a profit-sharing model with a third party provider.* |
| Charities | *e.g. Not applicable* |
| Businesses | *e.g. Shared transport businesses can earn a profit from the number of riders*  |

### Step 2: How well does it meet ‘Affordability’ goals?

**Please add evaluations based on the goals outlined above and complete the additional questions**

|  |  |
| --- | --- |
| **Affordability Goals as defined above** | ***Answers – please complete using what information you have available from your design sources*** |
| Commuters / workers / tourists/ young people | *e.g. Would be cheap to use, for those with incomes, people on very low incomes may have to weigh up cost vs walking*  |
| Providers and Businesses | *e.g. the cost of maintenance and theft/dumping will have to be considered* |
| **Gender and Diversity Smart ‘Affordability’ Questions** |  |
| Is an affordable alternative provided? – e.g. a walking route | *e.g. It will follow the same route as a walking route in most cases. We do not have information about price comparison to e.g. buses, trams* |
| Is it affordable for the transport provider? Is there a break-even level?  | *e.g. We do not have information about price comparison to e.g. buses, trams* |
| In the case of ‘shared transport’ - Will users’ own vehicles’ be permitted (e.g., personal bikes, e-scooters)? | *e.g. No personal e-scooters permitted but hard to police* |
| Does this solution allow access to basic daily activities within reasonable time and cost? Consider e.g. bus routes, employment sites, education access, health visits.  | *e.g. Yes, for those who can use it, it is quicker than walking, if destination is within permitted area, and can probably get the user closer to their destination. No information available on comparison to other forms of transport.* |

### Step 3: Affordability for Social groups and Providers – consider needs and intersections where relevant – some could be left blank

|  |  |  |
| --- | --- | --- |
| **Group** | **Score percentage** | **‘Affordability’ considerations** |
| Work commuters | 100 | *e.g. Affordable in relation to income level – it will always be cheaper to walk* |
| Leisure / off peak travellers | 100 | *Ditto* |
| Women in general | 70 | *Ditto in relation to income level* |
| Women or others making multiple / chained trips | 0 | *Probably not useful or affordable* |
| Adults travelling with dependent children or carers | NA |  |
| Low income groups, people on welfare | 20 | *It will always be cheaper to walk* |
| Young people and students | 40 | *Affordable in relation to income level* |
| School-children travelling independently | NA |  |
| Older people | 50 | *If some public transport is free or subsidised does e-scooter fit this model?*  |
| People with disabilities, physical or cognitive | 50 | *Likely to have income restrictions* |
| People travelling from or to remote locations | ? | *Not known* |
| Minority ethnic groups | 50 | *Likely to have income restrictions* |
| People feeling vulnerable in public spaces | 50 | *Not known* |
| Transport Providers | 50 | *Will depend on business model* |
| **Conclusions (Total % / n of applicable groups)** | 52% |  |

### Step 4: Affordability: Overall Evaluation

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| --- | --- |
|  | **Please summarise based on the comments and evaluations above** |
| **Affordable for who? Is it affordable for most citizens?** | *e.g. The solution is designed to be priced so that it is affordable for most users, as a way of saving time over walking for a small charge. It is likely it will seem more affordable to work commuters from a time/cost assessment, than it will for people on low or minimum incomes, who might prefer to walk and save their money.**e.g. Providers may find it affordable if it can be shown to have acceptable running costs or break-even return on investment from ride fares*  |
| **Not Affordable to who?** | e.g.*Women in general will find affordability harder than men because of lower economic resources**e.g. Older people on low incomes are not likely to find it affordable and may prefer to sit on a (subsidised) bus**e.g. How it is priced will affect whether young people as students or low earners think the time saving or novelty is worthwhile the cost.**The cost of lost or vandalised units or maintenance may impact Public Provider affordability.* |
| **Percentage Score** | **52%** |
| Copy a smiley to give your overall impression  | A yellow smiley face  Description automatically generated with medium confidence |

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| Excellent (70 to100%) | Good (60-69%) | Satisfactory (50-59%)  | Poor (40-49%) | Fails this indicator (0-39%) |
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Key

## **Indicator 4: Sustainable: Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.**

One key goal of sustainable travel is to reduce CO2 emissions, and enhance travel in an environmentally friendly and ‘green’ way, whether this is a mode of travel, or an infrastructure product. For example, utilising new ‘Smart’ technology may provide an advantage to the users in terms of ease of use or access to better information, improving traffic flow and reducing congestion. Sustainability should be offered to a wide group of users, offering green transport opportunities both now and for the future. Sustainability may also take into account the use of materials, energy and the life and maintenance of the product, from both user and provider perspective, (UN Goal 12).

### Step 1: The product has been designed to be sustainable in the following ways:

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| --- | --- |
| **User Group***(complete as appropriate)* | **How is it sustainable to end users?** |
| Commuters / workers / tourists/ young people | *e.g. The e-scooter’s use as speedy active travel can reduce the need for commuters to bring cars into the city, thus reducing CO2 Emissions. It may also reduce the numbers needing bus transport, again reducing emissions.*  |
|  |  |
|  |  |
| **Providers***(complete as appropriate)* | **How is it sustainable for providers?** |
| Local Councils | *e.g. Reduce CO2 emissions because there are fewer cars (and buses?) in the city**The e-scooter is made of sustainable materials.* *The hiring model means only a certain number of scooters are provided for the capacity of the city centre.* |
| Charities | *e.g. Not applicable* |
| Businesses | *Use of sustainable materials and repairability will be important* |

### Step 2: How well does it meet the ‘Sustainable’ goals?

Please add evaluations based on the goals outlined above and complete the additional questions

|  |  |
| --- | --- |
| **Sustainable Goals as defined above** | **Answers *– please complete using what information you have available from your design sources*** |
| *e.g. Reduces need for commuters to drive within city,* *reduce numbers needing bus transport* | *e.g. This may take some users out of cars and buses, but only those able to use e-scooters*  |
| *e.g. provider goals* | *E.g. Scooters are made of sustainable and recyclable materials* |
| e.g. made from sustainable materials | *e.g. Almost completely sustainable materials* |
| e.g. encourages users to use buses less | *e.g. Encourages younger/fitter people to use buses less* |
| e.g. encourages users to use public transport and/or e-scooter leaving car at home | *e.g. Encourages some users only* |
| Easy to maintain | *e.g. Reasonably easy* |
| Long life of product | *e.g. So long as e-scooter is not stolen or dumped* |
| **Gender and Diversity Smart Questions related to Sustainability** |  |
| Is it sustainable for single trips? | *Yes* |
| Is it sustainable for chained or multiple trips?  | *Unlikely* |
| Are some groups more attracted to sustainable solutions than others? Does the solution cater for these differences? | *If younger people are more attracted to sustainable solutions, then this certainly appeals to them.*  |
| Will the transport solution continue to be sustainable when users’ needs change? | *Yes: Because of the hiring model – a user does not own the item so if their needs change e.g. become parents or older people or less able to use an e-scooter then the product will remain available to people who can make use of it*  |
| Does it provide speedy trips with no emissions? | *Yes* |
| Will it encourage users to leave their cars behind? | *Potentially* |
| Wil it replace bus travel? | *Yes but only for younger more able-bodied users* |

### Step 3: Sustainability for Social groups and Providers

**Is this a ‘sustainable choice’ for these groups? Consider needs and intersections where relevant – some could be left blank**

|  |  |  |  |
| --- | --- | --- | --- |
| **Group** |  | **Score percentage** | **‘Sustainability’ considerations** |
| Work commuters |  | 100 | *A sustainable choice* |
| Leisure / off peak travellers |  | 100 | *Ditto* |
| Women in general |  | 70 | *Potentially yes* |
| Women or others making multiple / chained trips |  | 0 | *Probably not chosen* |
| Adults travelling with dependent children or carers |  | NA |  |
| Low income groups, people on welfare |  | 40 | *Potentially yes* |
| Young people and students |  | 60 | *Likely viewed as a Sustainable choice* |
| School-children travelling independently |  | NA |  |
| Older people |  | 0 | *Unlikely to see this as a sustainable option*  |
| People with disabilities, physical or cognitive |  | 50 | *Likely to have many reasons not to use* |
| People travelling from or to remote locations |  | ? | *Not known* |
| Minority ethnic groups |  | 50 | *Potentially yes* |
| People feeling vulnerable in public spaces |  | 50 | *Not known* |
| Transport Providers |  | 70 | *Will depend on business model, but is viewed as sustainable* |
| **Conclusions (Total % / n of applicable groups)** |  | 600/11=55% |  |

### Step 4: Sustainability: Overall Evaluation

|  |  |
| --- | --- |
|  | **Please summarise based on the comments and evaluations above** |
| **Sustainable for who? Is it sustainable for most citizens?** | *e.g. The e-scooter is* ***sustainable in that it will appeal to*** *the able bodied commuters and tourists it is aimed at. i.e.Students getting from home to campus, without driving, commuters coming into city by another means such as train and needing transit to place of work**Many other citizens would be excluded however* |
| **Not Sustainable for who? How is it not sustainable?** | e.g.*Excludes anyone not fit enough or confident to use it, excludes people with baggage, excludes people making chained trips, excludes people with accompanying dependants* *Women may be deterred from use due to their ‘office’ clothing or footwear. It is not effective for trip chaining or with dependents, or anyone carrying shopping. People with physical or cognitive disabilities will be excluded, people on low incomes may consider the cost too high. The impacts on pedestrians will reduce safety and comfort. Congested pavements may pose safety issues, and reduce the effectiveness of the scooter.* *There is a likelihood of theft in the hiring model, or items left abandoned in parks, riversides, or dumped – and when this occurs it is definitely NOT sustainable, wasting resources.* |
| **Percentage Score** | **55%** |
| Copy a smiley to give your overall impression  | A yellow smiley face  Description automatically generated with medium confidence |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Excellent (70 to100%) | Good (60-69%) | Satisfactory (50-59%)  | Poor (40-49%) | Fails this indicator (0-39%) |
| A yellow smiley face  Description automatically generated with medium confidence | Shape, circle  Description automatically generated | A yellow smiley face  Description automatically generated with medium confidence | A yellow smiley face  Description automatically generated | A yellow smiley face  Description automatically generated with medium confidence |

Key

## **Indicator 5: Inclusive: Which stakeholders/users are served by the product? What aspects promote the inclusive approach? What barriers will this help to overcome?**

Inclusion is seen as a universal human right. The aim of inclusion is to embrace all people irrespective of race, gender, disability, medical or other need. It is about giving equal access and opportunities and getting rid of discrimination and intolerance (removal of barriers). It affects all aspects of public life.

**Inclusive design:** Inclusive design is about making places that everyone can use. The way places are designed affects our ability to move, see, hear and communicate effectively.

Inclusive design aims to remove the barriers that create undue effort and separation. It enables everyone to participate equally, confidently and independently in everyday activities and to access a product or service equally – however they encounter it.

Inclusive design is aimed at considering and combatting discrimination against certain groups of people and the intersections between them. It should particularly consider groups who may be vulnerable because of perceived differences, such as ethnicity or different gender or ability.

We do not ask for goals to be defined here, these will be evident from the earlier sections. We simply offer questions to assess inclusive design for products. This section also includes explicit questions to assess how the product caters for the widest range of ability, by making the abilities more explicit. This is not an exhaustive list but covers the types of ability normally considered in an ‘accessibility checklist’. Considering this list may prompt designers to think about inclusivity issues they might otherwise have overlooked.

|  |  |  |
| --- | --- | --- |
| **TInnGO Questions related to Inclusivity** | **Percentage** | **Answers** |
|  |  |  |
| Does it offer effective, affordable, attractive and sustainable transport for all social groups? | *10%* | *e.g. No, because some groups are excluded by ability or age* |
| Does the solution provide security for vulnerable groups? | *30%* | *e.g. Some evidence that women prefer this to walking, although it was not designed to provide this feeling* |
| Does the solution apply to various social groups with regard to economy, disability, age? | *20%* | *e.g. May only be preferred by younger people, only for the most able* |
| What anti-discrimination efforts might be applied to this product/solution? Please make recommendations. | *NA* | *Recommendations needed here:* *e.g. perhaps a sit version of the scooter should also be offered, with carriage stowage for walking sticks and handbags* |
| **Physical and cognitive Accessibility questions:** |  |  |
| Will anyone be **excluded** because of issues with: |  |  |
| Vision impairment | *0%* | *Yes* |
| Hearing impairment | *0%* | *? possibly* |
| Cognitive impairment | *0%* | *Yes* |
| Strength, dexterity or reach | *0%* | *Yes* |
| Mobility: Walking, stair climbing, standing or balance | *0%* | *Yes* |
| Are provisions made for users with mobility aids.e.g., Wheelchair users, crutches and walking sticks? | *0%* | *No* |
| Overall Inclusivity Percentage = Total / n (mean) | *6%* |  |

### Step 4: Inclusivity: Overall Evaluation

|  |  |
| --- | --- |
|  | **Please summarise based on the comments and evaluations above** |
| **Who is included in this solution?** | *e.g. Anyone over 16 (?) who is physically fit with good balance, eyesight and hearing, the confidence to ride it and probably wearing flattish heels, and ideally trousers or shorts, carrying their things in a shoulder bag or rucksack* |
| **Who is NOT included in this solution?** | *e.g. Anyone not physically able to ride an e-bike, due to personal ability or weakness, anyone with cognitive disability, i.e. it is likely most older people will feel excluded. In addition, anyone with heavy luggage or unsuitable footwear or clothing, anyone with accompanying children etc will not be able to use the e-bike* |
|  | *e.g. it seems likely anyone with a visible ‘difference’ will feel uncomfortable about drawing attention to themselves by riding an e-bike, depending on personality*  |
|  |  |
| **Percentage Score** | **6%** |
| Copy a smiley to give your overall impression  | A yellow smiley face  Description automatically generated with medium confidence |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Excellent (70 to100%) | Good (60-69%) | Satisfactory (50-59%)  | Poor (40-49%) | Fails this indicator (0-39%) |
| A yellow smiley face  Description automatically generated with medium confidence | Shape, circle  Description automatically generated | A yellow smiley face  Description automatically generated with medium confidence | A yellow smiley face  Description automatically generated | A yellow smiley face  Description automatically generated with medium confidence |

Key

Part C: Overall Assessment

This is intended to summarize how the product fits with its own defined goals and how far it meets ‘Gender and diversity smart’ criteria. The Evaluator should complete a rating based on the ratings per each indicator already completed.

|  |  |  |  |
| --- | --- | --- | --- |
| **Does the design meet its own goals?** | **Percent** | **Smiley** | **Notes**  |
| *e.g. The e-scooter meets the design brief needs of appealing to young people and active, reasonably fit commuters who may choose to integrate use of an e-scooter into their daily commute from a train or bus hub.* | *80%* | A yellow smiley face  Description automatically generated with medium confidence |  |
| *e.g. the e-scooter could be an alternative to bringing a car into the city* | *70%* | A yellow smiley face  Description automatically generated with medium confidence |  |
| **Does the design meet the Gender & Diversity Smart goals - EAASI?** |  |  |  |
| 1 - EffectiveIs the product effective? | 43% | A yellow smiley face  Description automatically generated | *Effective for those who can use it – speedy and anywhere within city* |
| 2 - AttractiveIs the product attractive to a wide range of users? | 34% | A yellow smiley face  Description automatically generated with medium confidence | *Attractive to certain groups of users, mainly younger persons, possibly more males, but not others* |
| 3 - AffordableIs the product affordable to a wide range of users? | 52% | A yellow smiley face  Description automatically generated with medium confidence | *This is a Shared transport solution so affordable depending on charges for users and break-even point for providers*  |
| 4 - SustainableIs the product sustainable / does it encourage sustainable behaviour? | 55% | A yellow smiley face  Description automatically generated with medium confidence | *Good sustainability, as alternative to car travel, easy maintenance, OK so long as they are not stolen* |
| 5 - InclusiveIs the product inclusive from the point of view of gender and diversity? From the point of view of Accessibility? | 6%  | A yellow smiley face  Description automatically generated with medium confidence | ***Not very inclusive****, does not support chained trips, useful only for those with fitness and confidence, appropriate clothing, minimal luggage, reported to have negative effects and even dangerous to some disabled and elder pedestrians. Not inclusive for people with disabilities.* |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Excellent (70 to100%) | Good (60-69%) | Satisfactory (50-59%)  | Poor (40-49%) | Fails this indicator (0-39%) |
| A yellow smiley face  Description automatically generated with medium confidence | Shape, circle  Description automatically generated | A yellow smiley face  Description automatically generated with medium confidence | A yellow smiley face  Description automatically generated | A yellow smiley face  Description automatically generated with medium confidence |

Key

**What next?**

###

#### We hope this has given you some insight into how the product scores on the TInnGO ‘Gender and diversity smart’ indicators.

#### Perhaps the product met the design brief or your organisation requirements well but scored lower on the indicators? Having this knowledge can indicate where the gaps are and show aspects that could be improved or redesigned to be more inclusive and more gender and diversity smart.

#### **Designers:** you might want to revisit your design brief and discuss with your clients – is the brief wide enough? Does anything need to change?

#### **Evaluating a range of products?** You can use this knowledge to make choices or better predict take-up of a solution – does anything need to change to make it more EAASI?

#### The TInnGO team would like to hear your feedback about our tool.

#### Contact: Andree.woodcock@coventry.ac.uk