**Service Area of the Future: Student Brief**

One of the UK’s leading motorway service area operators, Roadchef, is looking for University of Bristol students to work together to come up with concepts, visually engaging designs or a framework to create a Motorway Service Area of the Future. Final concepts will be reviewed by the board at Roadchef where the student(s) with the most impressive idea will win £1,500 and the chance to work with the company to bring it to life.

**Background to the business**

Roadchef is one of the UK’s leading motorway and trunk road service area operators. With 30 locations across the country, the company aims to provide a restful and relaxing environment for over 52 million visitors to its motorway service areas each year.Roadchef achieved an overall satisfaction rate of 95% in 2020, the highest of the big three motorway service area operators, according to consumers responding to the Independent Transport Focus survey.

Roadchef is committed to ensuring its business operates in a sustainable way, minimising environmental impact and pioneering new and innovative ways of supporting this. It uses 100% renewable energy and was the first MSA operator in the UK to introduce solar panels to most of its sites, providing green energy to power its business. This alone has reduced carbon emissions by 480 tonnes per year.

The company is the proud recipient of the Zero to Landfill certification, which highlights that it reuses, recycles or safely disposes all solid waste without the use of landfills. To achieve this, Roadchef has undertaken a number of initiatives including collecting and recycling all waste coffee grounds.

All sites have recycling stations that make it easy for customers to separate and recycle plastic bottles and Roadchef was the first business in the UK to introduce “return reward” machines for plastic bottles. Consumers are encouraged to recycle their plastic bottles in return for a money off voucher. All of the company’s electricity comes from green sources thanks to its close relationship with Co-op Power.

Roadchef is also expanding its electric vehicle (EV) charging facilities – urgently delivering on an expanded charging network as part of the company’s wider sustainability focus and agenda to support Britain’s journey to be safer and greener. The rollout will help motorists make greener journeys by transforming the backbone of the strategic road network to support low and zero carbon travel, making it quicker and easier than ever to recharge.

In addition, Roadchef has recently announced a new partnership with sustainability certification provider Planet Mark, highlighting a major step in the company’s journey to reducing its carbon footprint. Demonstrating the business’ commitment to building a more sustainable future, Roadchef and Planet Mark have been working together to measure the company’s carbon footprint. By understanding Roadchef's current position they have been able set a goal of becoming carbon neutral by 2040. Over the course of the partnership, Planet Mark will help Roadchef to both deliver on its sustainability goals and certify its achievements.

**Background to the project**

Roadchef is fully committed to developing its business in a sustainable way, believing that sustainability must be at the heart of business operations. The company is proud of how far it has come, but has exciting plans to further minimise the impact its service areas have on the environment - through measures to reduce carbon emissions, water and energy usage, with the ultimate aim of becoming the driving force behind sustainable motorway service areas as well as becoming the greenest motorway service area operator in Britain.

To do this, Roadchef is working with University of Bristol to come up with concepts, visually engaging designs and a framework for the Service Area of the Future. These need to be innovative, progressive, exciting (perhaps slightly whacky!), but above all, they must be grounded in sustainable thinking, with all concepts considering how they would help Roadchef reduce its environmental impact.

The ultimate aim is to capture the imagination of travellers and for Roadchef to be able to use these design ideas/concepts in the media to generate some coverage around their bid to become the ‘greenest motorway service area operator.’ Equally, the ideas themselves need to be in some way workable, so that in the future, Roadchef, together with University of Bristol, can come up with a framework or industry model highlighting best practice ideas that can be applied in smaller service areas around the country.

**The brief**

Storm/Roadchef has undertaken research among road-users regarding what they would like to see at the service area of the future (2040) when it comes to facilities, amenities, building lay-out, restaurants, parking, sustainability initiatives etc – detailed analysis below. At the same time, Roadchef is also working together with sustainability certification provider Planet Mark to create environmental pledges for its business for the next 5 years. Whilst the majority of the green thinking and initiatives in reality need to be more back of house focused (i.e. from within Roadchef), this project should generate ideas that engage with customers and their behaviour. Examples include but are not limited to improvements in water, electricity and packaging usage, recycling, space requirements etc.

MSAs provide a service 24/7, with millions of visitors stopping by each year. How can a service station become net zero but sill offer motorists what they need when they need it?

**Research findings**

Below is a question-by-question analysis of the research findings, which asked road-users what they would like to see at the service area of the future (2040) when it comes to facilities, amenities, building lay-out, restaurants, parking, sustainability initiatives etc.

**Would you choose to stop at a service area that you are aware is doing more than others in terms of sustainability initiatives?**

1. Yes (56.7%)
2. No, but I would in the future (22.1%)
3. No, it is not important to me (21.3%)

*Key point: sustainability is a very important issue when it comes to consumers and stopping at motorway service areas*

**In your opinion, what is the most important when it comes to running a sustainable business, rank in order of importance:**

1. Reducing plastic waste (27.7%)
2. Minimising food waste (27.3%)
3. Increased use of renewable energy (21.0%)
4. Clear commitment to reducing emissions
5. Clear and simple recycling facilities
6. Reducing the use of water

*Key point: Reducing plastic waste, minimizing food waste and increasing the use of renewable energy are the three most important elements when it comes to running a sustainable business according to road users*

**How do you minimise your impact on the environment during a long journey (rank in order of importance)?**

1. Drive slowly and steadily (20.9%)
2. Travel in an electric vehicle (18.9%)
3. Recycle all waste from the journey (18.0%)
4. Car-share
5. Ensure tyres are fully pumped up
6. Drive at quieter times
7. Only stop at service areas with sound environmental practices

*Key points: According to road users, driving slowly and steadily, travelling in an electric vehicle and recycling all waste from the journey are the three most important ways to minimise your impact on the environment. It is worth noting, however, that for the younger age group (18-24), travelling in an electric vehicle is more important (31.9% ranked it as the most important) than the older age group (55-64) (12.0% ranked it as the most important)*

**If you owned an electric vehicle, would you stop to recharge at a major service area or a smaller charging area off the motorway during a long journey? And why?**

1. Major service area on the motorway (54.5%)

Over half of respondents said they would prefer to stop to recharge at a major service area. Some of the reasons for this included:

* No need to leave route
* It would probably charge quicker
* More convenient
* Safer
* More to do during long wait
* More likely to be space
* Quicker and easier to use
* More efficient
* More reliable
* More people around so feels safer

*Key points:* *More people would prefer to charge their electric vehicle at a major service area as they believe it would be quicker, more convenient, more reliable and more likely to be space.*

1. Smaller charging area off the motorway (45.6%)
* Just under half of the respondents said they would prefer to stop to recharge at a smaller charging area off the motorway. Some of the reasons for this included:
* Quieter
* Cheaper
* Safer
* More chargers available
* More peaceful
* Less energy

*Key points: The reasons people would prefer to recharge at smaller charging areas off the motorway include them being quieter, cheaper and safer, so it is worth considering how we can build these elements into the service area of the future.*

**What would you most like to see at the Service Area of the Future in terms of sustainability initiatives: (rank top 3)**

1. A greater focus on waste disposal and recycling (27.3%)
2. A greater focus on renewable energy use (20%)
3. Use of more solar panels (15%)
4. More electric vehicle charging points
5. Use of wind turbines to generate electricity
6. Reduction in water usage
7. Introduction of systems to enhance energy conservation
8. Different building materials used to create the service area structure

*Key points: A greater focus on waste disposal and recycling was the number one key element that road users would like to see incorporated in the service area of the future in terms of sustainability initiatives – this increased to 35.9% among respondents aged between 18-24. A greater focus on renewable energy use and the use of more solar panels made up the top three, meaning that it is important to consider how these may be incorporated into the design of the service area of the future to appeal to our target road user audience.*

**Part 2: Innovation**

**What do you find the most frustrating when you visit a service area? (choose 1)**

1. Queues for toilets (25.0%)
2. Hectic environment when I want to relax (14.4%)
3. Queues for food and drink (13.2%)
4. Not enough healthy food options (11.4%)
5. Difficulty finding parking spaces (9.7%)
6. Not enough choice of food / drink outlets (5.7%)
7. No space for dogs to exercise (5.6%)
8. Lack of space for children to play (5.1%)
9. Difficult to find seats in restaurants (4.8%)
10. Distance to walk to the restaurants/shops (3.2%)
11. Not enough choice of shops (2.2%)

*Key points: Queues for toilets, hectic environment and queues for food and drink are the top three most frustrating experiences at motorway service areas for road users. It will be important to consider these responses when creating the design for the MSA of the future*

**Which of these initiatives would appeal to you most? (rank each from very important, slightly important, neutral, not important)**

1. Increased number of toilets (27.7%)
2. A children’s play area / playground (11.9%)
3. Relaxation rooms (11.6%)
4. Field to exercise dogs
5. Increased number of parking spaces
6. Increased seating space at restaurants
7. All the shops / restaurants in one place
8. Increased number of electric vehicle charging points

*Key points: an increased number of toilets, a children’s play area / playground and relaxation rooms were the top three initiatives that would appeal most to road users. While an increased number of toilets was most popular across the board, a children’s play area / playground was naturally of more interest to the younger generation.*

**What changes would you like to see made to the look of service stations? (Pick top 3)**

1. More ethical and sustainable brands (52.9%)
2. Improved car parking areas (46.6%)
3. Use of more sustainable building materials (45.4%)
4. External building improved
5. Internal décor made more stylish

*Key points: The key change road users would like to see made to the look of service stations is the use of more ethical and sustainable brands. This is closely followed by improved car parking areas and use of more sustainable building materials.*

**Part 3: Functionality and relaxation**

**How long do you ideally want to stop for at a service area?**

1. 15 – 30 minutes (46.7%)
2. 30 minutes – 1 hour (31.1%)
3. Less than 15 mins (17.7%)
4. 1-2 hours (3.5%)
5. Over 2 hours (1.1%)

**If you owned an EV, would you want to stay in your car when it's charging, or do you prefer to sit in a service area?**

1. Service area (62%)
2. Car (37.9%)

**If you owned an electric vehicle, what would help you the most during a long drive that required a stop for charging?**

1. A route planning app to show charging points and availability (58.9%)
2. A booking service for a charging point (24.7%)
3. A catering delivery service so I can wait in my car while charging (10.9%)
4. Catering options that support my ethos of being more sustainable (5.6%)

*Key points: Interestingly many customers would appreciate a route planning app to highlight charging points and availability or a booking service for charging points to help them most during a long drive.*

**Which of these installed at a service area would bet help you to relax during a stop off from a long journey?**

1. Mindfulness areas or relaxation rooms including headphones to listen to relaxing podcasts (34.0%)
2. Sleep pods – areas with beds to sleep in during the day (28.3%)
3. Massage machines / therapists (12.9%)
4. A fully equipped spa – featuring a hot tub, sauna, steam room etc (11.9%)
5. Short yoga and meditation
6. Exercise classes

**Executive Summary**

The research findings highlight the importance of sustainability on the motorway for road users. The ability to reduce plastic waste, minimise food waste, recycle and charge electric vehicles quickly, easily, safely, peacefully and conveniently is key. Customers at service areas would like to see a greater focus on renewable energy use, the use of more solar panels, more ethical and sustainable brands and the use of more sustainable building materials. There is also a desire for more space (particularly when queuing for toilets and food/drink outlets) and a more peaceful environment to relax and de-stress. An area for children to play and dogs to run would also be appreciated by many road users, while relaxation rooms, sleep pods and massage machines/therapists would also help drivers relax during a stop-off on the motorway.

**Next steps**

The above is an overview of results from research carried out into the views of road users on current motorway service areas, and how they would like to see them changed in the future. Students are advised to use the information to guide and inform their designs, but it should not constrict or limit them in any way. However, final ideas must include some creative ways of tackling the above issues cited in the research.

We are looking for students to challenge the current motorway service area model and come up with ideas that encourages the industry to rethink the way it designs its sites in the future. Some ideas to address the above issues could include (but are not limited to) underground parking to solve the problem of not enough car parking spaces, living roofs to solve the problem of fields to walk dogs, playgrounds on the roof etc.