



Transition your sightseeing business to autonomous vehicle sightseeing

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Introduction

The web, social and mobile innovations in the last 20 years all altered how you as a vehicle based sightseeing operator retailed your tours.

You adopted reservation system technology, digitised your tour descriptions & availability and connected your products to online retailers using distribution technology. You setup social media accounts and reconfigured your tours for last minute mobile bookings & mobile ticket redemption. At times it has been hard to keep up with the pace of change.

Navigating the next innovation will be much tougher. Transitioning to autonomous vehicle sightseeing creates five key challenges:

- **The tour product is not the same as today** - itineraries evolve away from mainstream itineraries to digitally delivered personalised experiences. The new tour product does not fit into existing tour & activity reservation & distribution technology platforms
- **The vehicles are not the same as today** - new vehicles need be be acquired and made to operate. The vehicles are technically complex and investment to research & develop the foundation technology is beyond the resources of any individual company
- **The tour sale price is likely to be significantly lower than today** - if you want to maintain existing revenue levels, you are going to have to increase your booking transaction numbers. Otherwise you need to be planning on running a smaller business (it is going to have a lower staff count already as you won't need to employ drivers)
- **New heavyweight competitors are joining the industry imminently** - Ford, General Motors, Waymo (Alphabet / Google) & others - all launching autonomous vehicle ride-hailing services alongside Uber & Lyft - and all will want part of the vehicle sightseeing business
- **Timelines** - not totally clear when autonomous vehicles are going to be available (likely to be between 2 and 7 years away). You need to prepare for early availability of the technology but also not over commit in case the tech takes longer to mature than expected

This document outlines the key issues and presents how **Autoura** can help you transition from your current human-driven business to become an autonomous vehicle sightseeing business.

It will be a challenging transition but if you start now (by joining up as a member of our service) we can collectively make this transition happen.

What are autonomous vehicles?

An autonomous vehicle (also known as a driverless vehicle or a self-driving vehicle or a CAV - Connected Autonomous Vehicle) is a vehicle that is capable of sensing its environment and navigating without human input. i.e. no professional driver required.

Within tourism, we expect autonomous vehicles to either be designed for couples (capacity 2) or for family units in shuttles (capacity 6-8). There may also be a need for intermediate sized vehicles.



Flickr: Marc van der Chijs

What changes with autonomous vehicle sightseeing?

Flickr: Richard



The 100 year story of vehicle based sightseeing has been defined by the need for drivers.

Once you have the cost of a driver built into your tour business you want to make them drive a high passenger capacity tour bus as this is the most efficient way to spread the driver cost. Paying for one driver to drive 30 paying tour customers is better than paying for one driver for 10 tour customers.

Once you have a high capacity bus you need to provide tours & experiences that are going to be attractive to large numbers of people (in order to fill these large busses).

As a direct result of hiring drivers companies had to provide popular mainstream tours

Now remove the driver (as we do with autonomous vehicles). We are no longer constrained to large tour busses instead we can offer smaller vehicles (family unit size) and each vehicle can take its own, personalised, route.

A completely new product experience

The removal of the the driver cost and increased daily utilisation (e.g. day & evening tours) suggests autonomous vehicle sightseeing tours are likely to be significantly lower priced than existing tours.

When these more affordable tours are available on the market and when people trust autonomous vehicles sufficiently (which won't be immediately), people will not want existing vehicle based tours.

The industry is starting from zero again - new tours, new vehicles & updated businesses

What changes with attraction bookings?

Alongside significant changes to sightseeing (where you visit multiple places of interest in a sequence) there will be big changes for standalone attraction bookings.

For example a zoo with a ticket entry price of 50 USD may pay commission at 15%.
A retailer selling 3 tickets @ 150 USD will earn 22.50 USD commission.

Autonomous vehicles are expected to cost 0.40 USD a mile. (Compare to current human-driven Uber taxis estimated at 2.50 USD a mile)*

The 22.50 USD commission earned from selling the 3 zoo tickets is much more significant to the vehicle operating company than the taxi cost / revenue.

This opens up all sorts of possibilities with attractions providing free branded autonomous vehicle pickups for people within 10 miles if you book direct or travel agent retailers providing a free autonomous vehicle pickup paid for out of their commission income.

* ARK Investment Management - <https://ark-invest.com/>

Is not transitioning to autonomous vehicles an option?

Perhaps in the near term in some destinations existing human driven tour vehicles will remain viable but in the long term in all capital and major cities, all tour vehicles will be autonomous.

It is expected that autonomous vehicles will provide a better customer experience at a lower price than most existing sightseeing via vehicles. Once a customer has had a better experience, it becomes the standard that all experiences are measured by, so market demand is likely to drive adoption of autonomous vehicles.

Existing sightseeing vehicles will still be legal and there will be some demand. However sightseeing is all about the experience - customers tend to have a choice of options - and if there is a better, cheaper, autonomous vehicle experience vs a more expensive human driven tour bus experience, it is likely that the customer would book the autonomous experience.

One factor that may play a part on this is the availability of autonomous vehicles. There may be a low number of autonomous sightseeing vehicles on the roads initially. However, most ride-hailing autonomous vehicles (e.g. autonomous taxis) will be able to provide sightseeing experiences (with the right route data), so we are not persuaded that any shortage of autonomous sightseeing vehicles will be sustained.

What else changes for the overall tourist experience?

There will be changes impacting many types of leisure experiences that tourists and locals currently enjoy and how these are suggested & retailed by travel agents & hotels.

For example consider how hotel concierges suggest to a customer where to go to shop and then where to eat nearby. Currently they mark a cross on a paper map and hope the customer successfully navigates to the right place.

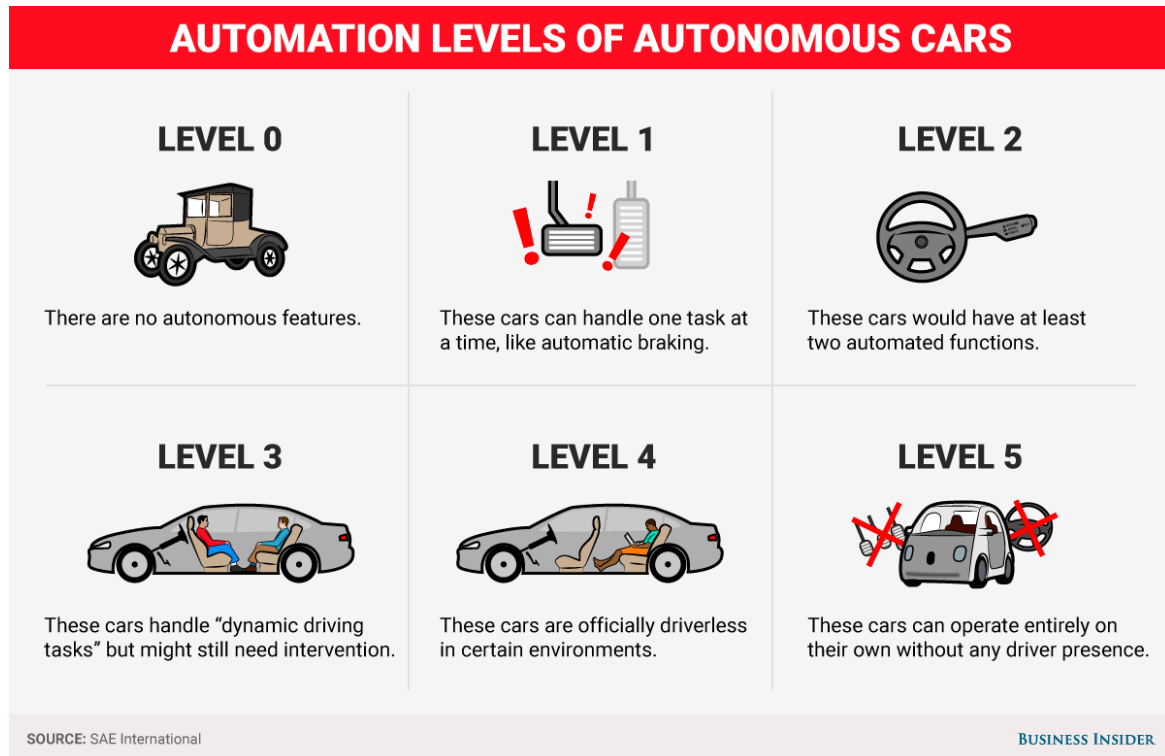
With autonomous vehicles the hotel concierge can set the destination and the vehicle will drive the hotel guest to the right shop. The car can then wait, pick up the customer and take them to the restaurant. A seamless, brandable, attributable, experience.

Autonomous vehicles will provide the bedrock for an massive leap in innovation for many kinds of local experiences for both tourists and local customers.

When will autonomous tours replace human tours?

This is the big question.

To answer it we need to understand firstly where the technology has got to so far and also what the future competitors are doing.



Technology timelines

Progress towards fully autonomous vehicles is measured in levels. Level 4 and level 5 are the two levels that we are interested in. Level 4 is expected to be available in 2020, level 5 in 2025.

We are preparing on the expectation that initial city based autonomous vehicle sightseeing services can operate using level 4 technology as routes can be specifically mapped and will be within a short distance of operational bases.

We expect that research companies that attain level 4/5 will license their technology fairly soon after it becomes available although some companies may retain their technology in-house to operate their own services. Autoura is not conducting its own primary research for self-driving technology - we will be licensing from others.

In addition to vehicle technology, cities have to be ready also. i.e. just because vehicles can drive safely doesn't mean you can operate autonomous sightseeing tours immediately. Some cities will be ready when vehicles are, others will be ready later.

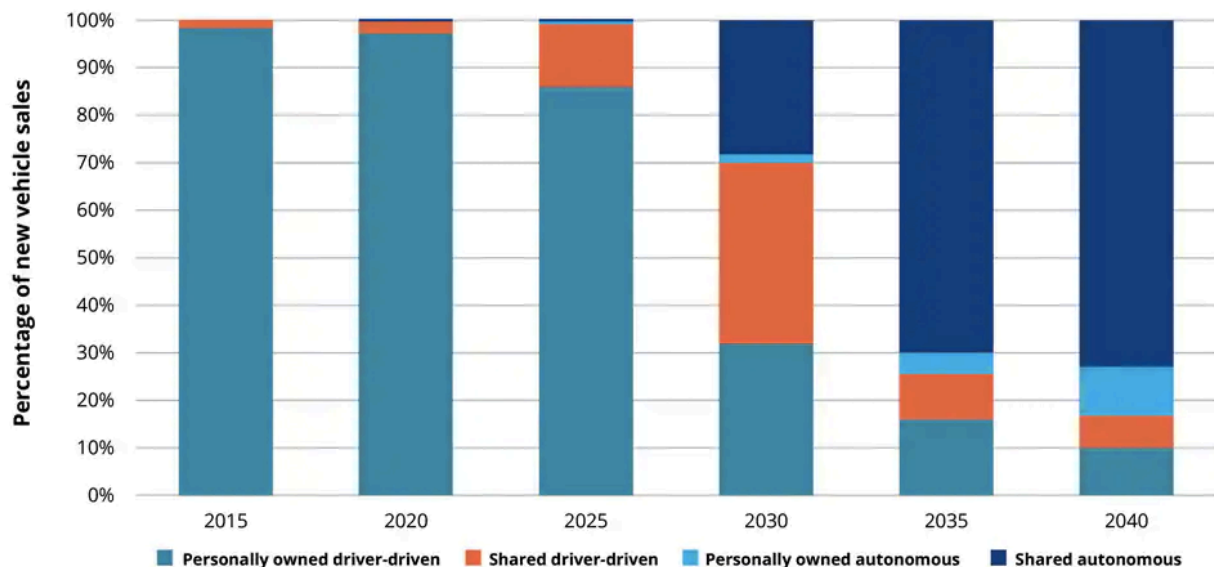
A London Assembly (local Government) report in 2018 put level 5 autonomous vehicles later than the above, at 2030, so there is not complete expert consensus on the timing yet.

The Autoura transition plan sidesteps this problem by focussing initially on route development rather than vehicle technology (see later).

Personal car ownership & ride-hailing competitors

This graph, published by Deloitte in 2017, suggests that the big shift to autonomous vehicles starts at around 2025 and has taken hold by 2030, within the USA.

Figure 3. Forecast of new vehicle sales distribution in urban areas in the United States



Source: Deloitte analysis based on publicly available information. See appendix for data sources.

Graphic: Deloitte University Press | DUPress.com

As a result of the shift away from personal car ownership, Ford, General Motors and other vehicle manufactures (OEMs) are preparing to evolve their businesses into services. General Motors is launching an autonomous ride-hailing service in 2019, Ford is launching their large scale autonomous ride-hailing service in 2021. They are reacting now, ahead of the ownership change.

Waymo (Alphabet / Google) plans to take one million people by autonomous taxi per day by 2020.

We suggest that by 2025 there will be a general over-supply of significant ride-hailing companies, all of which HAVE to make ride-hailing work at scale for the long-term viability of their businesses.

Additionally each ride-hailing service will have a local over supply of vehicles as their business models require there to always be "a car around the corner".

They will look at autonomous vehicle sightseeing as an attractive business to be in as there is money to be made earning travel agent commission on taking a couple of people to an attraction rather than competing in autonomous taxis at highly competitive costs per mile.

Potentially just 2 years away

Taking the technology timelines and the announced dates for General Motors, Waymo (Google) & Ford launching large-scale ride-hailing services we predict that commercial pressures to transition to autonomous vehicles could start in major North American, European & Asian cities in 2020.

Pressure will arrive earlier in specific pilot cities where autonomous vehicles are being tested ahead of large scale rollout. (e.g. some cities in the USA such as San Francisco & Phoenix)

The nearness of this date is why we suggest that you start your transition planning immediately, if you have not already done so.

What is your transition plan?

Your Autoura enabled transition plan is in two phases:

Initial phase

1. Route development including attraction bookability
2. Business preparation
 - A. Experience design
 - B. Operational standards creation
 - C. Vehicle research & development

Vehicle phase

3. Autoura branded autonomous vehicles

This two phase structure enables us to retain the necessary flexibility to handle:

- **Timeline variance** - being ready to trade with autonomous vehicles by 2021 but also not looking for commitment to buy vehicles now before they are available - and handling in a sensible way what would happen if autonomous vehicles are not here until 2025-2030
- **Business model variance** - supporting sightseeing operators who wish to begin building autonomous vehicle sightseeing routes now but are already committed to a sightseeing brand and have no desire to change that

Route development

This transition task is about the creation of routes that autonomous vehicles can drive.

Autonomous vehicle sightseeing is not existing itineraries in updated vehicles but a whole new way of looking at sightseeing route design. Sadly this means we need to mainly start again with routes although we can use existing routes for inspiration.

Route design includes:

- **Themed routes** - A route is a sequence of places to visit e.g. The aquarium to the beach to a park with a view to a specific restaurant. These are themed e.g. one route could be designed for travelling with toddlers, another for those with specific interest in a certain style of architecture. We expect a destination to have many hundreds of routes - customers will select a route from a play list much like they select a music track on today's music streaming services.
- **Place of interest configuration** - creation of places to stop within our content platform - e.g. an attraction, a place with a view, somewhere to eat etc. Bookable stops (e.g. attractions) can be configured to connect to 3rd party reservation systems for availability / bookability.

If you join us as a member, primarily this is where you will focus your initial commitment. We need your local knowledge to roll this out smoothly. We can also on-board your existing bookable attractions so bookings for those attractions route via your existing contracts.

Our Autoura platform fee is structured as a minimum monthly commitment for spending on route development. This expenditure takes place via the Autoura content marketplace where you can hire route designers to research & write routes & configure stops. i.e. we are not expecting you to research & write these new routes directly yourselves although you can if you wish.

If you don't have the time to select and direct these route designers, we can do that task for you. i.e. we can make this a zero time commitment task.

Once you have a route designed that route is associated to you. You earn revenue from routes.

Experience design

Just because something is new doesn't immediately make it better.

During the first phase we will spend effort validating that autonomous vehicle sightseeing will be a better overall customer experience. We need to research best practices for route design and finalise how customers are going to practically experience the product in the real world.

We intend to do this real world testing using electric scooters / dockless bikes prior to autonomous vehicles becoming available. For cities with scooter / bike fleets this Autoura platform capability is a bonus and can create immediate revenue opportunities from designing routes rather than having to wait for autonomous vehicles.

By becoming a member you can join our regular (quarterly) experience design expert group, providing your input into our experience design work.

Operational standards creation

Collectively we need to learn how to operate an autonomous vehicle sightseeing business.

This includes working out practical issues such as cleaning standards, battery recharging schedules, how to deal with lost property etc.

We will be publishing our standards and companies that want to operate our (branded) autonomous vehicles in the future will be expected to comply with our operational standards.

By becoming a member you can join our regular (quarterly) operational standards expert group and help define these future operational standards.

Vehicle research & development

Autoura is investigating specific vehicle needs for autonomous sightseeing vs autonomous ride-hailing. We are not intending to build a vehicle ourselves but license technology, including vehicles, from independent providers.

Out of this research & development work we intend to create at least one platform solution - vehicle & software - that can be purchased by members.

By becoming a member you can join our regular (quarterly) vehicle research & development expert group, providing your input into our research & development work.

Autoura branded autonomous vehicles

In the vehicle phase, members will be able to buy (either from us or from a manufacturer) autonomous vehicles that can be used for commercial autonomous vehicle sightseeing services. These vehicles will include the Autoura platform and routes data and will be branded Autoura, or dual-branded, as Autoura and your existing sightseeing brand.

We intend to have a diversity of available vehicle designs (to handle different tourism situations and climates).

When you sign up to become an Autoura member, this relates to the initial phase only. Additional commercial agreements may be required to move to the vehicle phase.

If other sightseeing brands offer vehicles you will be able to use the routes you designed via Autoura in the initial phase in those vehicles. e.g. if you are part of a sightseeing brand franchise today you can join Autoura now, help build sightseeing routes and gain transition knowledge, and then use those routes in any vehicle platform they provide for you. (You would access those routes as an Autoura affiliate in compliance with affiliate terms & conditions & revenue agreements)

How do Autoura members make money?

Routes that you pay to develop earn you money. e.g. if a route includes visiting an attraction and we earn travel agent commission income from booking that attraction, that travel agent commission is shared with the route creator(s).

The route creator(s) include the organisation that funded the route development (i.e you) plus the independent route designer. We do expect the route designers to be paid for creating routes upfront so the revenue splits below are to build a passive income rather than to pay for their initial work. For this we expect them to assist in maintaining the routes on an ongoing basis.

For any commission earned (or income from e.g. advertising) we will firstly remove the credit card transaction charges then:

Data only & non-Autoura branded vehicles

e.g. a 3rd party incorporating Autoura route data into their services:

- 30% to Autoura (to pay for platform provision, money payouts, customer service)
- 30% to affiliate (covers marketing)
- 25% to the member (covers who paid for the route to be developed)
- 15% to the route designer (incentivises the route designers to create & maintain great routes)

These roles are able to be duplicated. e.g. if you have a means of retailing to customers you can be both the affiliate and the member - earning 55%.

Likewise we expect route designers to act as affiliates in some situations.

If Autoura is on 20% commission this means that around 5% of the total transaction revenue will go to you the member (will be just under due to initial removal of credit card fees).

Autoura branded autonomous vehicles

When we have real world vehicles:

- 40% to the vehicle operator (to pay for the vehicle and running costs such as charging)
- 30% to Autoura (to pay for platform provision, money payouts, customer service)
- 15% to affiliate (covers marketing)
- 10% to the member (covers who paid for the route to be developed)
- 5% to the route designer (incentivises the route designers to create & maintain great routes)

Depending upon the competitive situation, we expect that customers will pay to use an autonomous vehicle on a per mile basis so the above is not a revenue limit but additional to per mile charges. We expect per mile fees to go to the vehicle operator fully.

Our aim is to motivate members to become vehicle operators and therefore take 50% of the revenue share. Autoura vehicles can access all suitable routes in a region (and are not restricted to a single member's routes). The splits above take that route share-ability into account.

Note the above needs various sales taxes to be taken into account and is for indication purposes only. Current revenue splits will be published on an ongoing basis.

Expected outcomes

We appreciate that existing vehicle based sightseeing companies face difficult challenges in planning for different possibilities.

Our two phase transition plan covers a number of possibilities for where the industry may go in the near term, and therefore what you need to be covering from a risk perspective.

We consider there to be four primary outcomes:

Outcome	Routes used	Impact on your current business
You own and operate autonomous vehicles and are strong enough to compete alongside global ride-hailing companies	Use Autoura sightseeing routes & platform	Your business survives the transition (as long as you have access to customers via retail distribution networks)
Ride-hailing companies win at vehicle based sightseeing	Use their own sightseeing routes	You do not have a business
Ride-hailing companies win at vehicle based sightseeing	Use Autoura sightseeing routes	You will not have the same business as today (as you will not have vehicles) however you will have a business that survives the transition
Autonomous vehicles later than expected so you continue trading with your existing human driver vehicles	-	Your business is OK for the moment

The fundamental decider between these outcomes is whether the new ride-hailing companies coming into sightseeing (we believe they will) and how successful they are at that - and whether Autoura route data is used in all services or just Autoura branded vehicles.

We do think that bikes / scooters have a part to play in local sightseeing however they are not suitable for young families, nor luggage, nor the less mobile, so although they will be everywhere for transit, autonomous vehicles will provide capability for longer journeys hence why not specifically mentioned above. Don't ignore them though.

Built-in advantages for existing sightseeing operators

If you have read this far and are an existing vehicle based sightseeing company and have not started your transition plan, you are right to be worried.

However you have some in built advantages that the new ride-hailing companies do not have (currently):

- **Depots** - you have vehicle storage / maintenance depots in convenient locations. New entrants (e.g. Ford) are talking about repurposing car dealer forecourts (as they won't need dealers or forecourts if there is no personal car ownership). You are one step ahead.
- **Relationships with attractions** - you have longstanding relationships with attractions that you now can use to your advantage
- **Service operation experience** - you know how to run a vehicle based sightseeing company from an operational perspective. Ford & other vehicle manufactures do not.

The challenge is using these positives to build a long-term sustainable competitive advantage as the new ride-hailing companies will soon catch up otherwise.

Safeguard your business with Autoura

Primarily we are providing a method to mitigate your current exposure to the industry disruption created by autonomous vehicles and the new industry entrants they will bring with them.

We provide a relatively inexpensive way to begin your transition without having to commit to vehicle purchase now. We are your best chance to ensure your continued business viability if you are late and have not started any other transition plan.

Initial phase

- **Content management platform** - manage descriptions, images, attributes for your routes and places to stop
- **API** - publish a full API for companies to incorporate routes into vehicles and other trip planning services. Make your routes available to your existing partners.
- **Connection to retailers** - existing tour & activity sector distribution platforms are not suitable for distributing autonomous vehicle sightseeing experiences. We need to build new industry wide processes and then onboard retailers such as vehicle manufacturers (OEMs) and online travel agents (OTAs). We will do this work.
- **Content marketplace** - access influencers and freelancers to help develop your routes. One single monthly payment to us, we handle the route designers. Autoura takes a 10% service charge on all payments via the content marketplace to cover money transfer & admin costs.
- **General support & advice** - we are going to go through this transition together. We will support you through it with access to best practices and case studies. Some of these best practices we will work on together within our 4 expert groups.

We do not have a method for attraction suppliers etc to access the Autoura system directly. We are not a tour & activity distribution platform. Instead we will connect with 3rd party reservation systems and, where necessary, existing attraction retailers such as online travel agents.

Vehicle phase

- **Consumer facing brand** - that can co-exist alongside other sightseeing brands. Autoura is “auto-tour” with an A on the end
- **Autonomous vehicles** - we will conduct the research & development to create a perfect autonomous vehicle for sightseeing purposes. You will have to buy these vehicles yourselves.
- **Vehicle technology platform** - an application that sits within a vehicle operating system that accesses Autoura route data and advises vehicle driving systems where to go to next
- **Customer service** - booking support etc
- **Other tools** - access to tools, services, knowledge & advice required to operate an autonomous vehicle sightseeing operation

Please note our initial contract relates to route development & knowledge. If you wish to move to the vehicle phase with us (when vehicles are purchased) we will need a new agreement. You are under no obligation to move to the vehicle phase.

Risks

All new technology projects come with risks...

Risk	Severity	Mitigation
No vehicle research organisation makes their level 4/5 autonomous technology available for licensing	High	We will have to build our own technology. Very undesirable as this is incredibly expensive & time consuming. Potentially a project ending risk. There are a few open source vehicle projects that we could potentially use as a basis of a vehicle so we are sure we would find a way forwards
Fewer existing sightseeing companies sign up than required in the short term for Autoura viability	High	Autoura will continue without existing companies. We would prefer the support of existing companies as we need you - but we are committed and we will find a way forward if we have to
Autoura is a small team and may not deliver on its promises	Medium	Autoura has as a priority to build team and competency in all the areas required to operate a global autonomous vehicle sightseeing operation. If you can help us with that, please do offer
Require level 5 autonomous vehicles rather than level 4 for sightseeing	Medium	This could mean plans for autonomous vehicle sightseeing are pushed back to 2025. We will have no choice but to wait. If this risk happens, we will likely focus on electric scooters / bikes and longer distance car road trips and fully commercialise our experience design tests using those vehicles
Not enough money to share between all the people on a route on a per transaction basis	Medium	<p>This is a challenge with our revenue sharing business model. We know that it is a small amount of revenue per transaction to share with a wide group of people involved making the booking happen.</p> <p>We will try not to revisit the revenue share business model but we are aware that this is a possibility</p>
Routes become the only differentiator between different autonomous vehicle sightseeing services and Autoura has to restrict route distribution to maintain competitive positioning	Medium	<p>We are going to keep a close eye on this.</p> <p>We commit that current members will always (as an affiliate) have access to the routes they paid for</p>
Too many companies sign up from the same region	Medium	Our model incentivises companies to join early as instead of having exclusive regions, we have exclusive routes. i.e. the first in to a region can create what they think are the popular routes and duplicates or similar routes will not be permitted. The model does support multiple companies in a region to an acceptable extent.
We are not being sufficiently bold and others may follow with bolder visions	Low	Our no blockchain, no AI, no loyalty scheme approach lets us focus on the basics first. We have a lot of work to do to get to the point that we have the right routes, the right vehicles, the right marketing and the right operational standards. Lets use technology we all understand first before taking it up a level.

Frequently asked questions

What happens if autonomous vehicles don't materialise for a long time?

The advantage of our transition plan is that we help you cover your risk that autonomous vehicles impact your business sooner than you expect but also handle in a sensible way if autonomous vehicles are further out.

e.g. if they become available in 2025 rather than 2021 then the initial monthly content commitments are set at an affordable level for an extended initial route design phase.

Are autonomous vehicles really a priority right now?

Do you buy sightseeing tour vehicles today? If so you probably expect 5-15 years usage and a resale value.

Even taking the furthest out projections for when autonomous vehicles will be available customer demand and final resale value for your existing vehicle fleet will be negatively impacted during its lifetime.

If your business is reliant on your vehicles as the backbone of your operation then yes, absolutely, transitioning to autonomous vehicles should be a priority today.

Can't I just wait until autonomous vehicles are here, then react?

Sure - yes you can. That is fine. You risk another Autoura member jumping ahead in your region and developing all the routes that you will need to trade with in the future. It will be harder to overcome from a trailing position.

Our mission is to make it as simple as possible for you to start the transition process now. At least then you know you have autonomous vehicles covered as a risk and you can then focus on other priorities for the next 12 months.

Will ALL tours & activities be impacted by autonomous vehicles?

No - only vehicle based tours.

Attractions are going to need to adjust their car-parking / entrance areas - increasing the size of drop down / pickup areas, and potentially moving car-parks to be further way (as cars will self-park). We will work on advice you can give them to help them with their transition.

Some tours currently are provided with a hotel pickup service (either on the way to the tour location, or as a pickup and transit to a central tour departure point). Hotel pickup strategies may need looking at in light of autonomous vehicles.

We expect autonomous ride-hailing services to be able to provide hotel pickup services, or autonomous vehicle sightseeing companies with vehicles with spare capacity. A change, but not a significant one.

Do I have to be running an existing vehicle based sightseeing operation to take advantage of this?

No - we expect new businesses to setup as the autonomous vehicle sightseeing company of their region. New entrants will not have existing overheads or obligations and therefore more likely to be able to adopt an autonomous model ahead of local incumbents.

Will we ever need to buy vehicles?

No. The Autoura platform distributes routes to other vehicle and mobility platforms so you don't need to buy your own vehicles now or in the future. However we do expect greater opportunities for entrepreneurs who do buy and operate autonomous sightseeing vehicles, when available, and our revenue model reflects this expectation.

For example if you are a regional destination marketing organisation (DMO) you may want to help create bookable routes for your region but have no intention of ever operating autonomous vehicles. That is perfectly fine. In fact it is better than fine, it is brilliant. We support this.

Can we have exclusivity for a country or region?

Our model is based around route exclusivity, not geographic exclusivity.

This means you can't create a route that significantly overlaps an existing route. Therefore if you become an Autoura member and create a route first, we associate that to you, no one else will be able to set up one that is similar.

What stops members creating duplicates of popular routes?

Technical checks are implemented in the platform to ensure that routes created by one member are not directly copied by other members trading in the same location. i.e. this maintains the route design exclusivity that the business model revolves around.

Additionally members may manually flag routes they feel are too similar to their own and a decision will be made with results published in public.

What if more than one member has booking contracts with the same attraction?

We know existing sightseeing companies have contracts with local attractions. We want to reuse those contracts if you wish to, making it easy to incorporate those attractions into your new routes, in your name.

The simple rule is the first member configuring a specific attraction gets their own attraction contract used (if they wish to).

We will however replace bookability contracting & routing for individual attractions / stops for the following reasons:

- Better data or ticket redemption technology (e.g. if we can connect to a system that holds live supplier connected availability, we deem that better than connecting to a system with human managed availability data that may be always slightly out of date)
- If the actual supplier requests us to book a different way or to book with them directly

Although there is commercial benefit to you being first (and on-boarding local attraction bookability via you), primarily you should look at the routes revenue as what you are benefiting from over the longer term, not small revenue margins for attraction bookability that may route via you initially.

We expect to tighten and define exactly these situations where we will replace bookability routing in the future (e.g. whether commission level / price is a factor) and also rights of appeal.

Is Autoura exclusive to other sightseeing brands & autonomous vehicle projects?

No - you are free to join other projects, for example those organised by your sightseeing brand franchise provider, if you are a member of an existing sightseeing group.

We already have a local sightseeing brand - can we continue to use it?

Yes. We envisage that you could use the sightseeing routes within vehicles that are branded as your existing brand or a new brand you could create. To take advantage of our complete platform including the vehicles and navigation platform, we expect dual-branding including Autoura as a minimum (Vehicle phase)

We already have invested in creating sightseeing routes for our current vehicles - can we use them instead of spending money on new routes?

Autonomous vehicle sightseeing is not current routes in new vehicles.

Due to digital delivery of experiences we can offerer completely different tours. We will support existing routes (please do add them to the Autoura platform) but the focus should be on creating new routes that take advantage of the new capabilities.

Can I bring my own team to research & create sightseeing routes?

Yes of course. Wonderful.

We can set your team up as unpaid route designers and assign route designer revenue from them to you. (i.e. if you are paying their salary you should take their share of the route revenue)

If you work with freelancers or social media influencers you can bring them to the Autoura platform and work with them via our marketplace.

Will there be one winner?

Unlikely. Like hotels, tours & airlines, it is likely that there will be chains, alliances and independent businesses.

However, as autonomous vehicle sightseeing is more technology based than current sightseeing operations, there are likely to be economies of scale and network effects which may create an environment where larger companies dominate.

I am in a country / city where it is unlikely autonomous vehicles will be here for a very long time - what can I do?

Good question. It is likely that major European / North American / Asian cities will be earlier than for example regional cities, rural locations or countries where transport technology is lagging.

However consumer behaviour will change everywhere - and you can still take advantage of sequences of things to do as supported by the routes. For example the Autoura platform works perfectly for bike and scooter experiences.

Who pays for the tech platform and everything else?

Autoura does.

Our approach is that you spend on the sightseeing routes that you receive direct benefit from over the long term, we spend on technology and brand. In this way we are like a content publishing platform but where we assist you with what to publish.

Is Autoura a reservation or distribution system?

Absolutely not.

Keep your existing reservation and distribution technology for your existing business (if you are a current vehicle based sightseeing operator). We are creating new customer experiences using new technology and marketing in completely new ways. We are not replacing anything.

Who owns the routes?

When you, or route designers under your direction, upload routes we expect you/them to comply with this condition:

When you upload, submit, store, send or receive content to or through our services, you give Autoura (and those we work with) a worldwide license to use, host, store, reproduce, modify, create derivative works (such as those resulting from translations, adaptations or other changes we make so that your content works better with our services), communicate, publish, publicly perform, publicly display and distribute such content. The rights you grant in this license are for the limited purpose of operating, promoting, and improving our services, and to develop new ones. This license continues even if you stop using our services (for example, no longer paying membership fees). Make sure you have the necessary rights to grant us this license for any content that you submit to our services.

This is the same legal clause as you will find on other leading travel industry content platforms such as review platforms.

Are grants available for route creation?

Local grants may be available to you as many local governments want to help with the transition to autonomous vehicles. We can assist in any applications you may make in your locality.

If you are spending as a content expenditure, this is a content budget item. If you are paying the minimum monthly commitment but not allocating those funds to route content, this can generally be considered as an IT expenditure.

For European Union grants, Autoura, although we enable bookability of local tours, activities & attractions, is primarily classified as travel guide and as such should not create State Aid issues.

Can vehicle manufacturers (OEMs) become an Autoura member on the same basis?

Yes - our platform works for vehicle manufacturers launching ride-hailing services with sightseeing capabilities. You can access our team of route designers to create routes, branded as yours, for use in your vehicles and elsewhere.

We are a large sightseeing business. Why can't we transition to autonomous vehicle sightseeing by ourselves, without Autoura help?

Four main reasons you should not do this yourself:

1 - Your future competitors are not existing sightseeing businesses that you are strong against today. Instead they are Google (Waymo), Apple, General Motors, Ford and other vehicle manufacturers. Competing against them as a small number of independent destinations is unlikely to succeed. (Also you will not just be competing against these sizeable companies, but also competing against Autoura!)

2 - The technology challenge is an advanced innovation problem to solve. There are economies of scale from developing the necessary technology in collaboration with other sightseeing companies who are in a similar situation and all who MUST transition their existing businesses by 2025 at the latest.

3 - You will need to distribute your new sightseeing experiences to retailers (including new retailers rather than existing tour, attraction & activity retailers). Distribution will be easier if your autonomous sightseeing experiences are on a single industry wide platform. (Autonomous vehicle sightseeing products do not fit within existing tour & activity industry distribution platforms or reservation management technology)

4 - New skills are required to create routes and to technically operate autonomous vehicle sightseeing platforms. Do you have those skills or wish to recruit those skills?

What happens to our routes if we stop paying membership fees?

Your routes stay associated to you and you will continue to earn income from the routes. However you will lose your position in the priority queue for vehicle hardware as you will no longer be classified as a member.

Is equity in Autoura available? Are we fund raising?

We are not currently fund raising.

If we do raise we will prioritise companies who are active paying members & affiliates or companies who can otherwise help us achieve our objectives.

Please email Autoura CEO Alex Bainbridge if you would like to talk about fund-raising: alex@autoura.com

Won't publishing this transition plan exacerbate the ride-hailing crossover problem and focus their attention on the attractive opportunity that vehicle based sightseeing offers?

Possibly. Security by obscurity never really works so they are going to come into sightseeing whatever we do.

Instead of worrying about that we should be focussing on creating the best routes we can, as soon as we can, and then the new ride-hailing companies will be incentivised to use Autoura route data in their new services, creating you revenue, rather than going and building their own.

Why Autoura?

Autoura is financially and technically backed by CEO/CTO Alex Bainbridge, tours & activities sector innovation leader and former CEO/CTO of TourCMS. His notable global industry firsts in this sector include:

- **First reservation system using the Software as a Service model (SaaS)** in 2007 (alongside Rezgo), having first launched TourCMS server installed in 2003
- **First to reservation system distribution connectivity with online travel agents** - 2013-2015. TourCMS was selected by Expedia, GetYourGuide, HotelBeds, Veltra & TourRadar as the first supplier reservation system to connect to for live price & availability data and bookability capability

He remains trusted by leading vehicle based sightseeing brands and leading online travel agent retailers as a long-term reliable technology delivery partner for innovative projects.

Both these industry firsts define the underlying technology used in the tours & activities sector today. Alex successfully sold TourCMS end of 2015 and is now focussed on his 3rd industry defining project, autonomous vehicle sightseeing.

We are motivated by "positive disruption", creating sustainable, profitable businesses for all stakeholders going forwards. Other entrants who will compete in this sector may not have such a collaborative, positive, mindset.

As such we are the only company coming at autonomous vehicle sightseeing with a transition plan for existing vehicle based sightseeing companies.

Why be an early Autoura member?

Early Autoura members will benefit more than those joining later:

- **Design all the best routes for your region (or country)** - our exclusivity is based on route exclusivity not geographic franchises so there are real benefits to progressing with Autoura early as members from your region joining later will have to reuse your routes
- **First in the queue for autonomous vehicles** - we expect supply of vehicles to be initially limited. We will prioritise early Autoura members (at least for the vehicles we sell)
- **Learn the most** - we promise you will learn the most about autonomous vehicle sightseeing and therefore be best prepared for the change whether it comes in 2 years, 4 years or 8
- **Have the best chance to navigate the transition** - this transition is going to be tough. The sooner you start, the more likely you can navigate it safely

Minimum monthly content spend & platform fees

We are looking for a minimum commitment of **500 GBP*** per month to be spent via the Autoura content marketplace with independent route designers & Autoura staff [~650 USD*]

We expect larger companies to spend at least **1000 GBP*** per month.

Our suggestion is that you should spend **5% of your annual new vehicle budget** on mitigating your autonomous vehicle risk - i.e. larger companies, especially those in multiple locations, should be paying a lot more as you need many more new routes to be developed.

If in any month you spend under 500 GBP via the content marketplace this will be counted as a platform access fee. i.e. you reach a point where you believe there are sufficient routes in your region, you still pay the monthly minimum.

This is a monthly commitment **per country** you wish to create routes in. e.g. if you want to create routes in 3 countries, your monthly minimum commitment is 1500 GBP. You cannot create routes in countries that you are not a paid up member for.

While you maintain your monthly minimum we will consider you an active member.

We do not have finalised costs for vehicles at this point. Our initial contract relates to route development and access to our knowledge & consultancy, not vehicles.

**UK VAT Sales tax to be added where applicable.*

Contracts are month to month for the first 12 months. After 12 months they become rolling annual. Vehicle phase contracts (for Autoura branded vehicle operation) are likely to be multi-year contracts.

Sign up at autoura.com/join

Please go to autoura.com/join to sign up and join Autoura as a member.

Questions? Alex Bainbridge, Autoura CEO, alex@autoura.com

Subscribe to the Autoura industry newsletter <http://eepurl.com/dhHrCz>

Immediate steps following signup

Introduction

First step is an introduction phone call. We will want to say hello (!), introduce ourselves and understand:

- Who you are e.g. the people on your team
- More about your destination, where tourists travel from to come to your destination, whether all year round or seasonal
- Whether you have vehicles (numbers / sizes) and what kinds of tours do you run?
- Your technology platforms
- Do you run airport transfer services? Taxi services? School runs? Ad-hoc coach hire?
- Whether you have relationships with attractions or other local tourism points of interest you wish to use
- Whether you work with any freelancers or social media influencers you would like to invite to Autoura to assist on designing your routes
- Whether there are any bike / electric scooter companies in your destination already

From this we will begin to build a distinctive routes strategy for routes in your destination - for now (perhaps for bikers / scooters / walking) and long term (autonomous vehicles).

If you are not an existing business, that is great, we will want to find out more about your motivations and what we can achieve together.

Next steps

We will assign you a route designer to begin working on your routes & your stops. Ultimately you will work with many route designers over time however good to start with one so they can guide you through the first steps while you are learning how it all works:

- Add the main attractions (manually) including images, descriptions
- Create the first few routes so you can see how it all pulls together
- Create a list of medical facilities and toilets in your destination (not all public toilets, just those in the main tourist areas)

Then

- Your first route designer will teach you how to set new route design jobs in the content marketplace
- Add a few routes for development in to the marketplace and wait for route designers to contact you offering to assist. e.g. a route designer who specialises in tours with toddlers will help on your toddler safe tours.
- Select a route designer or two that match your need for local knowledge, timezone etc
- Repeat!

Within two or three months you should have the basic information for your destination covered (depending upon how large your destination is, and whether any other members have already started adding attractions and places of interest there). Ultimately you will want hundreds of very different routes as that is what is required by autonomous vehicles. We will help you with that.

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Version 2018/09

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