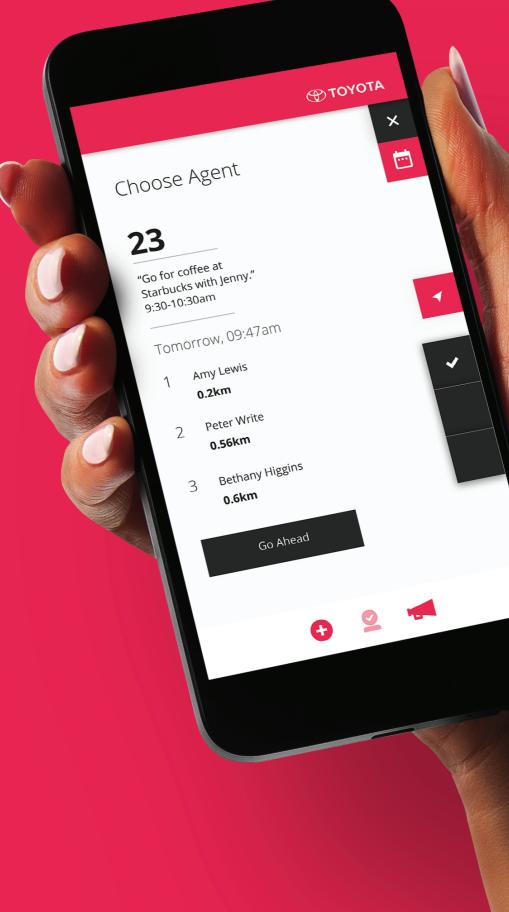
al.packer by toyota

As little as 40%* of shoppers are currently very satisfied with the online shopping experience. From vague delivery information, to finding your parcel left in an inconvenient place, a new delivery solution is needed.

Say hello to al.packer! A new, smart service application that provides a socially sustainable solution to the last mile of package delivery. As designers we have combined our capability in Product and User Experience Design to create a solution with the customer's needs at the centre.

*IMRG UK Consumer Home Delivery Review 2017



TOYOTA_LOGISTICS_2018

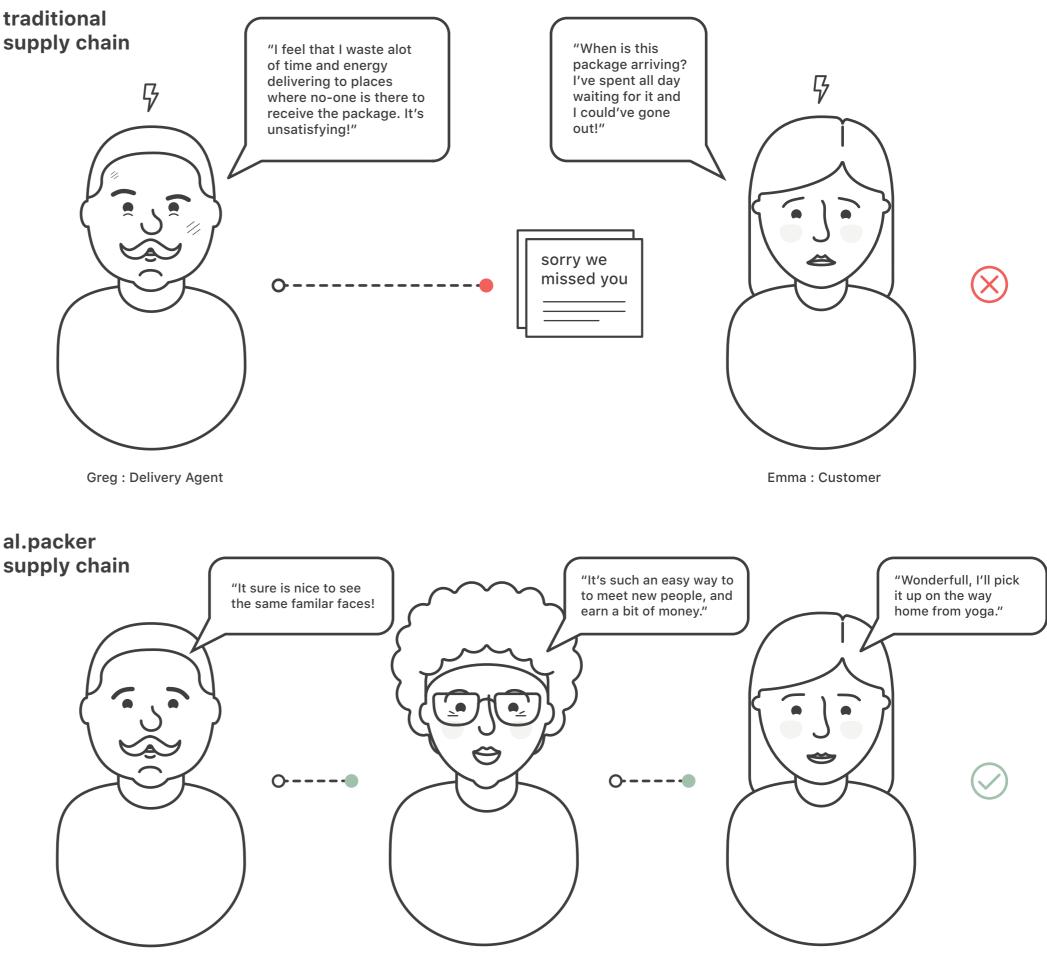
the problem

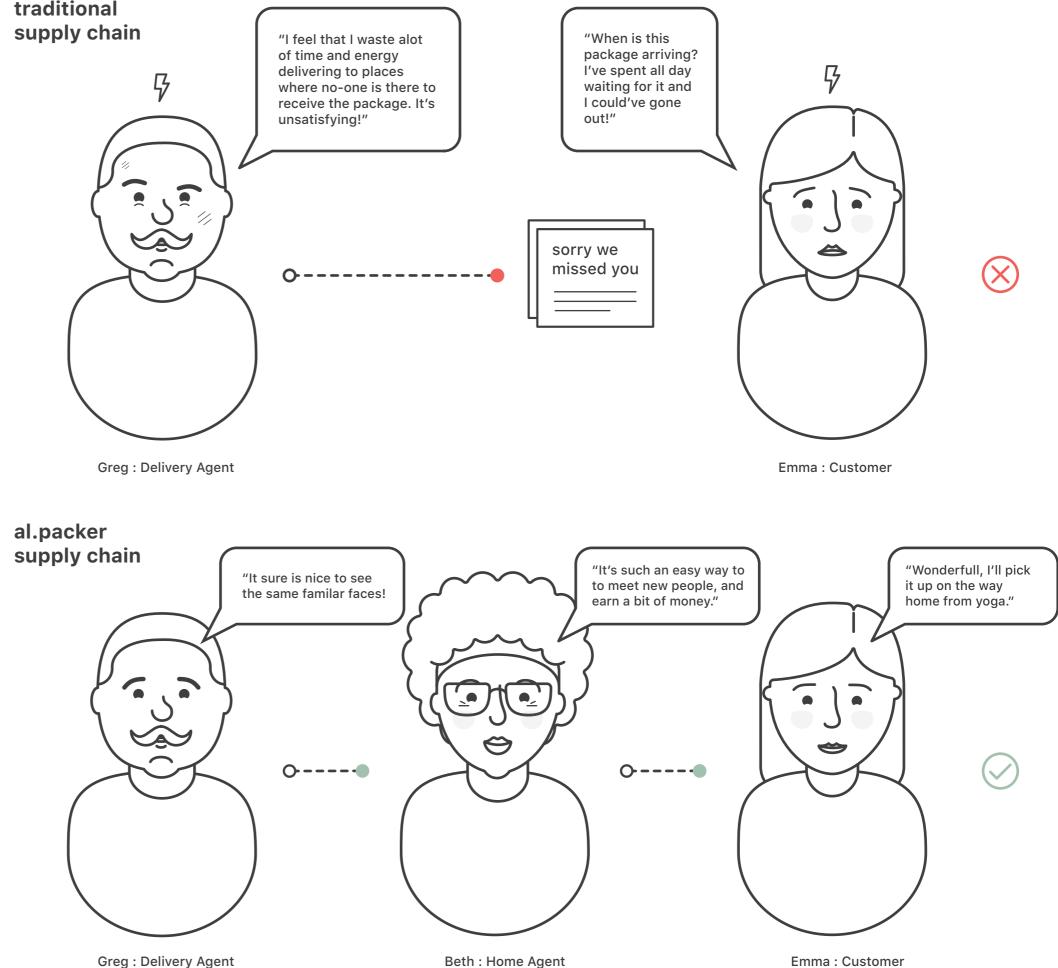
One of the biggest problems with the traditional supply chain is that at the last mile 'no one is home to receive the package*'. The problem of an unsuccessful delivery is that it then falls upon the consumer to resolve. The average round trip is a 'little over 3 miles', taking 'more than 30 minutes*'. This process is inconvenient for the Delivery Agent, and frustrating for the Customer.

'Click and Collect' is often thought of as a good solution to this issue, however the service still has it's limitations regarding the size of the package, and the opening hours of the location. Furthermore, in 2017 delivery to a 'safe place' such as shed, or neighbour is still the most popular destination. The problem with this option is that the choice of 'final delivery spot' is left to the discretion of the Delivery Agent (which can easily fail to meet the customer's needs and the package could fall into unsafe hands).

There is also a severe level of uncertainty with the current supply chain. Whereas in 2009 the preferred services were ones which allowed the shopper to specify a delivery date and time during the order, now access to tracking information and receiving pre-delivery alerts are considered more important. The shopper wants to be able to anticipate their delivery and not commit themselves. Although Amazon Flex has looked at tackling this problem, we believe the novelty of our idea lies in the guaranteed hand-over to the end consumer who is collecting the package themselves.

al.packer abandons the traditional supply chain to reduce the amount of pain points that are commonly associated with package delivery. The introduction of a customer-approved third-stakeholder eliminates the chance of an unsuccessful delivery or ambiguous final destination as they are guaranteed to be in to accept it. The end-customer can then collect their package at a time that suits them, and at a location that they have specified. Furthermore, the solution provides the customer with real-time tracking information and alerts in order to keep them notified the whole time.





Emma : Customer

the last mile

1. Customer orders package

In the future there will be an improvement in lead-time. The customer will only have to choose their Home Agent a day in advance. This means the customer can synchronise their schedule with the app so that their locations for the following day can suggest Home Agents who are near-by.

2. Delivery Agent picks up package

The customer will receive regular updates with this information. The customer will be reassured to know that their package is safe. Furthermore, if there were a problem or delay this would be communicated and the customer would have the opportunity to change the location.

3. Home Agent receives package

With the new system, there is no ambiguity. The delivery agent is provided with a comprehensive report including the exact drop-off location and person receiving the package. This ensures safe handling of the package and eliminates the risk of a 'failed delivery'. The process will also provide subsidiary benefits such as increasing the delivery agent's job satisfaction and efficiency.

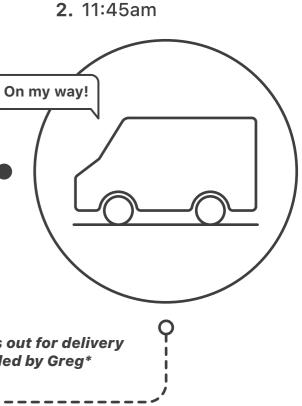
4. Customer picks up package

Whilst it is important to revolutionise the current supply-chain, we must look back at what was successful about old one. In research, *79% of people would be happy for a specified neighbour to sign for deliveries. In fact, this is the most preferred delivery option if the customer isn't in to receive the package themselves. By adding in the 'third stakeholder', al.packer builds on this humanistic element. It ensures that the Delivery Agent, Home Agent and Customer all receive the social interaction that people favour about the current supply chain.

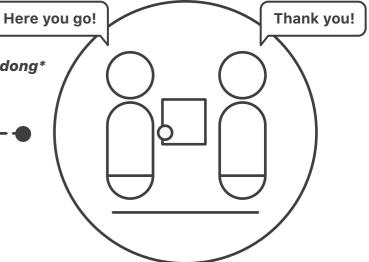
*IMRG UK Consumer Home Delivery Review 2017

ping **1.** 9:30am Purchased O C *Your package is about *Your package is out for delivery to be delivered to Beth!* and will be handled by Greg* *ding dong* 3. 1:30pm Hello Beth! *ding dong* Delivered *ping* С *Your package is with Beth *Beth has accepted your let her know when you want pickup time as 5:30pm* to collect it*

Your order is being processed thank you for choosing al.packer



4. 5:30pm



the service

A socially sustainable future

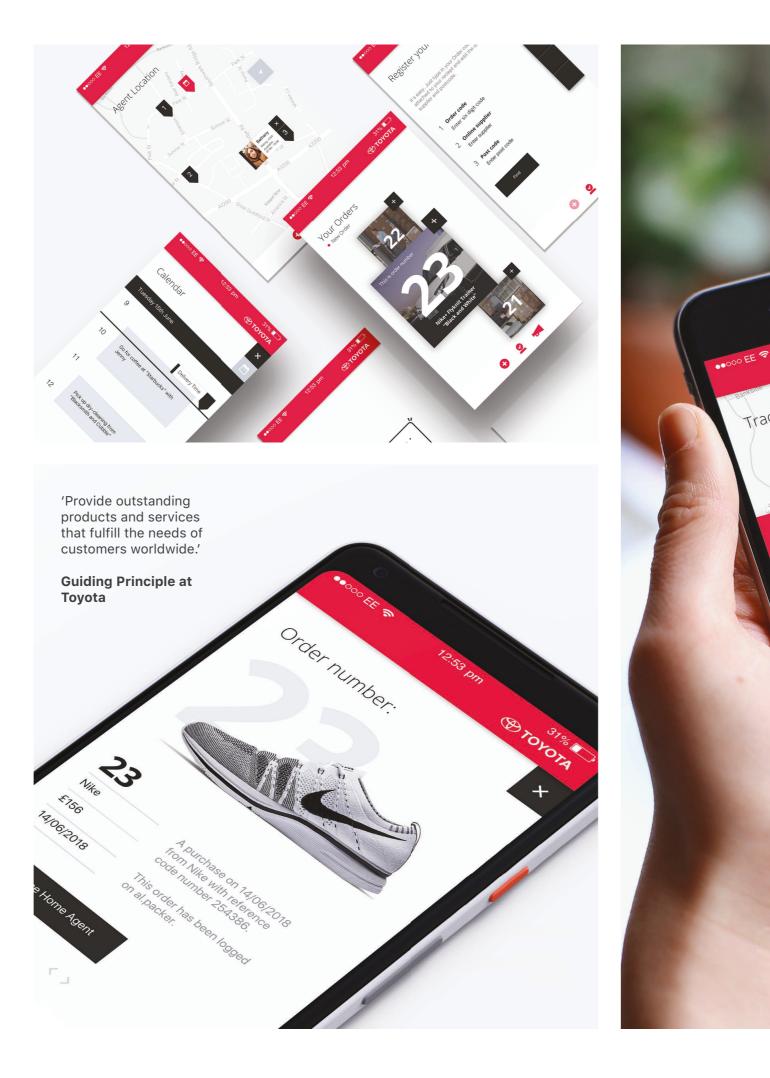
Chasing the success of new 'gig-economy' service designs such as Uber and Airbnb, al.packer enhances the user experience by being a socially sustainable solution. By encouraging communication between all parties and an emphasis towards 'stay at home' users, al.packer will provide the opportunity to develop new relationships with those who may not normally see people on a daily basis. As well as being socially sustainable the al.packer concept will be cheap and easy to implement as it requires no new hardware to be manufactured and distributed.

Expect even shorter leadtimes

One of the main opportunities of the al.packer platform is the potential to decrease delivery lead times, as the Delivery Agent will be able to drop multiple packages in one location. The effect of this is that more packages can be processed, and through economies of scale provide cheaper delivery costs for the consumer. This is an attractive offer to the recipient, but also to the delivery agent as they will be more efficient in their role. The enhanced features of al.packer will help to attract users to the platform, as it will offer benefits for everyone associated in the supply chain.

Final statement

al.packer is the next big revolution in the delivery industry. By abandoning the traditional supply chain and focusing on the implementation of Home-Agent drop of points, al.packer solves a humanistic problem by introducing communication between everyone involved in the supply chain. As a socially sustainable solution, al.packer encompasses Toyota's own values as it focuses on enriching the lives for 'stay at home users' by bringing them into the community.



'Contribute to economic and social development through corporate activities in (each nation's) respective communities.'

> Guiding Principle at Toyota

