

# Understanding platform businesses in the food ecosystem

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## Foreword

The Food Standards Agency was set up in 2000 to protect public health and ensure that the food people buy and eat is safe and honest. In the past decade, we have seen the food landscape evolve dramatically, with an increasing amount of food sold over the internet.

This shift has been further embedded in the past year due to social distancing and lockdown measures during the Coronavirus pandemic. More and more bricks-and-mortar businesses have moved their operations online; according to the Office of National Statistics (ONS), food vendors saw their online sales increase by 79.3% from 2019 to 2020, [ONS data on retail sales in Great Britain 2020](#).

Online platforms – which facilitate the exchange of goods between consumers and vendors – constitute a large part of this change, as the food industry, like travel and retail before, goes through a process of ‘platformisation’. These new intermediaries bring challenges for us to tackle, but also opportunities for us to seize.

Platform businesses can significantly benefit consumers, thanks to the increased accessibility of a range of vendors and a wider choice of product. And they can benefit businesses, too, through additional revenue streams and opportunities to test out new products and markets. At the FSA, our interest lies in assessing how public health and



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consumer interests might be affected by platformisation. We must continue to protect them, making it easy for digital businesses to do the right thing without restricting innovation in this space.

This report takes a snapshot of platform businesses in the food ecosystem as they operate today, as well as related changes in the industry. We know that the landscape will continue to shift and evolve, and it is our responsibility as the regulator to understand and adapt to those changes in the coming years.

Ultimately, that will enable us to make sure consumers can have the same confidence when they are buying food online as they do in the traditional, physical world.

**Julie Pierce**

Director of Information, Science and Wales



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## Introduction

The [Food Standards Agency \(FSA\)](#) is responsible for public health in relation to food in England, Wales and Northern Ireland. It makes sure that people can trust that the food they buy and eat is safe and is what it says it is.

As part of this responsibility, the FSA works to understand the continuing evolution of the food landscape to identify:

- opportunities to improve standards of food safety and/or authenticity
- any new or magnified risks from which consumers should be protected.

One area that has evolved rapidly is that of digital platforms in the food and drink industry. Consumers are increasingly purchasing food via third party intermediaries, known as 'aggregators', from a range of vendors. Digital platforms remain a relatively new concept, with many launching in the past decade. As such, there has been a knowledge gap in government about how these platforms work and how they impact the landscape in which they operate.

The FSA engaged Foundry4 to carry out discovery research exploring digital platforms within the food landscape to help narrow this knowledge gap and enable the FSA to make informed decisions in the



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coming years. [Foundry4](#) is a product, technology & data company, focused on supporting organisations to deliver digital products in complex institutional environments.

This project had two objectives:

- To colour in the food platform picture at a more granular level in order to enable a shared understanding of what is meant by 'platform'
- To draft hypotheses for where and how the FSA may want to intervene in order to promote positive behaviours around food being safe and what it says it is

This report details our findings about what platforms are, what types exist, and how they might be reshaping the food landscape.

## What is a platform ?

Before the 1990s, vendors primarily sold food to consumers via two routes:

1. **Directly** – in their restaurant or shop, by phone or mail order
2. **Via a retailer** – where they sold the product to the retailer, who then sold it onto the consumer or other businesses

In the 1990s, a new route began to emerge: selling food to a consumer via an online intermediary platform. Since then, the volume of



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transactions taking place via this route has grown dramatically; in 2019, there were 7.5 billion food deliveries made in the UK, [UK restaurant takeaway sector 2020 growing faster than any other](#).

This evolution can be described as ‘platformisation’ – the platform-based transformation of an industry. It brings with it a set of inevitable changes, as platforms “become powerful actors who set the rules of the game in their markets”, [Platformization in Europe](#) (PDF).

## Definition

A platform is a technology business that facilitates the exchange of goods or services between vendors and consumers. They can be defined in differentiation to vendors and retailers:

	Owns stock	Sells more than 1 vendors' stock	Description
<b>Vendor</b>	Yes	No	Sells food to consumer
<b>Retailer</b>	Yes	Yes	Buys food from multiple vendors and sells it to consumers
<b>Platform</b>	No	Yes	Facilitates the sale or exchange of food between vendors and consumers

This is a simplified definition; there are many other characteristics of platforms that dictate how they behave in the food landscape. Equally,



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several different terms are used in the food industry and elsewhere, including 'intermediary' and 'aggregator'.

The way platforms define themselves in public-facing assets can tell us a lot about their priorities. Many platforms operating in the food landscape define themselves not in relation to food but to their business model and their relationship with consumers.

## Technology- first

Platforms are online- first, with strong data and digital capabilities:

- [Facebook](#): "builds **technologies and services** that enable..."
- [Just Eat](#): "we use our **technology** to..."
- [Deliveroo](#): "driven by **technology**"

## Customer- centric

Platforms focus on the benefits to their customers and the connections they can create:

- Facebook: "...enables **people to connect with each other, build communities** and grow businesses"
- Just Eat: "... **bring together** millions of customers with thousands of restaurant partners"
- [Uber Eats](#): "...connects **you** with a broad range of local restaurants and food"





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- [Airbnb](#): "...for guests to experience the world in a more authentic, **connected** way"
- [Amazon](#): "our mission is to be Earth's most **customer-centric** company"

These points show that while customer centricity enables the platform to bring together many players from the food landscape, technology enables the platform to collect, store and analyse information about those players and the flows between them.

## Appeal to vendors and consumers

### Vendors

For vendors, platforms offer access to a wider consumer base than a bricks-and-mortar store or vendor-owned website. Platforms target their advertising to vendors by focusing on the potential increase in sales and revenue when selling via the platform. An Uber Eats survey from 2019 showed that restaurants in London offering delivery for the first time via their platform saw a 69% overall increase in sales after joining, [Deloitte Delivering Growth report](#).

Selling goods and services via a platform enables a vendor to focus purely on food production. The marketing, order management and delivery can be handled by the platform and its related services.



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Vendors hoping to enter a new market – whether a new location or a new vertical, such as desserts – can use a platform to reduce risk. It enables them to test out the market with lower barriers to entry and kickstart growth.

## Consumers

For consumers, platforms offer access to a wider choice of goods and services than buying directly from a single vendor. This choice normally comes with a degree of tailoring – the ability to narrow options using filters and search to fit an individual's requirements.

Platforms also offer a level of standardisation. Rather than going through a different user journey for each vendor they buy from, they are offered a consistent layout, journey and payment method.

## Network effect

The 'network effect' is a term used to describe the phenomenon of a platform gaining additional value the more people that use it. Vendors benefit from more consumers buying via the platform in order to increase their reach and revenue. Consumers benefit from more vendors selling via the platform in order to increase their choice and ease. This creates a self-reinforcing cycle.



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As platforms grow, it becomes increasingly difficult for vendors – particularly smaller, independent ones – *not* to use the platform, because much of their potential consumer base uses it to purchase goods or services.

As a result, platforms gain a certain level of influence and control over the landscape; their position “conveys ‘bouncer’s rights’ in the sense that control over the platform also conveys the power to exclude from the ecosystem as a whole.”, [Platform rules: Multi-sided Platforms as Regulators report](#).

This ‘power of exclusion’ enables quasi-regulatory behaviours, such as specifying minimum FHRs requirements, made possible by the position to grant access to large volumes of consumers.

## Business model

The business models employed by platforms vary and evolve both on an industry scale and within individual companies. The components impacting how platforms operate include:

- Revenue model
- Type of goods or services
- Level of curation
- Steps in supply chain
- Delivery method



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Some businesses sit across more than one category.

## Revenue model

Platforms sell software and professional services, not food. Services include:

- Marketing vendors to consumers, providing 'lead generation'
- Screening delivery partners and enabling vendors to connect with them
- Handling online payments
- Managing the first level of customer service

They frequently generate revenue by charging fees to more than one side of the platform. A common set-up is:

- Fee paid by customer for each transaction or delivery of a round £2, [Food Delivery companies compared](#)
- Commission paid by vendor on each order
- Purchase of branded kit by delivery driver

Other models in use include charging the vendor a 'start up fee' to cover the costs of the hardware and software installation. Many also generate revenue through advertising.



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## Type of product

One way we can differentiate platforms is those which are food-specific – for example, only facilitate the exchange of food products – and those which are generalised – ie also enable the exchange of other goods, such as gifts. This impacts in particular how information about the products is structured and presented, as well as the joining requirements for vendors. Some food categories bear a higher level of risk than others to consumers.

## Curation

Platforms can be categorised as ‘high curation’ or ‘low curation’, [Food in the platform economy understanding and governing emerging online marketplaces for food \(PDF\)](#). High curation platforms raise the barriers to entry for vendors – for example, requiring document checks – in order to provide consumers with a smaller but higher quality choice. Low curation platforms keep entry requirements low, meaning that the choice of vendors is broader but the quality may be more variable.

There are some ‘hybrid’ curation platforms, where some vendors – such as supermarkets – are subject to more and higher entry requirements, while others – such as individuals – can join easily.



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## Steps in supply chain

The route the goods take from the vendor to the consumer can be broken into steps, which can then be aggregated or disaggregated by a platform. Some platforms specialise in only one step, where others have expanded up or down the chain. The disaggregated steps include:

- Preparation & cooking
- Agreeing exchange of food
- Transferring money
- Delivery & distribution

## Delivery method

The delivery methods to get food from the vendor to the consumer can differ by method – post, courier, bike, car or van – but also by timescale. On-demand delivery refers to the immediate delivery of goods from a vendor to a consumer when requested, normally within an hour. In contrast, scheduled delivery is the delivery of goods from a vendor to a consumer in a particular time bracket, normally of a day or more.



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## What types of platforms exist?

Platforms can be grouped into three categories:

- Online food order & delivery platforms
- Marketplace platforms
- Redistribution platforms

### Online food order and delivery platforms

An online food order and delivery platform enables the purchase and on-demand delivery of goods. The goods are most frequently ready-to-eat meals, but increasingly groceries are also sold via this route.

Online food order & delivery platforms commonly partner – exclusively or mixed – with four types of vendor:

1. Restaurant
2. Virtual restaurant
3. Home kitchen
4. Retailer

### With restaurants

Online food order & delivery platforms enable a consumer to view, compare and purchase ready-to-eat meals from multiple vendors – normally restaurants or cafes.



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Vendors sign up to sell via the platform. This sign-up process can differ, but there are some constants when partnering with larger scale platforms. These platforms normally:

- Require the vendor to be registered as a food business and have an FHS rating, often of 2 or above
- Provide a tablet and printer to the vendor (and can provide packaging for a cost)
- Provide – and require the use of – software that displays incoming orders via the platform, along with consumer custom requirements, reviews from customers and delivery partners, and reporting on profits
- Take a commission on each order of 10-30% and/or service fees
- Connect vendors with a network of self-employed delivery partners to carry out the on-demand delivery to the consumer
- Manage payment processing from the consumer to the vendor, and to the delivery partner on behalf of the vendor

A subset of this activity is the delivery of food to businesses rather than individuals. There are business-specific platforms, such as [City Pantry](#) (owned by [Just Eat](#)), or business-specific offerings from generalist platforms, such as [Uber for Business](#).





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As well as ready-to-eat meals, many restaurants started offering 'DIY meal kits' during the pandemic; 15% of customers surveyed had ordered one on [Deliveroo. \(Deliveroo: Share of Stomach report\)](#).

**Examples:** Just Eat, Deliveroo, Uber Eats, City Pantry, Foodhub, HungryPanda, Supper, Feedr

## With virtual restaurants

A virtual restaurant, also known as a 'delivery-only brand', creates food for delivery, not for eating in a restaurant. The focus is on food that travels well and is in demand in a particular location or by a particular demographic. Virtual restaurants produce their food in a dark kitchen, or in the kitchen of an existing restaurant, and ordering and delivery takes place via a platform.

As of December 2019, [2,000 virtual restaurant brands are available on Deliveroo](#), which highlights Deliveroo Editions restaurants ("Delivery-only kitchens for your neighbourhood") to the consumer in the app.

Virtual restaurants can be owned by a bricks-and-mortar restaurant, a delivery platform or a new food business.

A new set of businesses focuses solely on creating virtual restaurants. These include [Rebel Foods](#) in India, [Taster](#) in London and Paris and [Feastr](#) and [Virtual de Lux](#), both in London. They develop virtual brands based on



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research into consumer tastes and work to ensure the brands' food can be produced consistently in multiple locations. For example, they might A/B test recipes, gathering consumer feedback to improve recipes and packaging before rolling out production to new locations, [Sifted: What's next for on-demand food delivery](#).

In order to build brand awareness, some virtual restaurants collaborate with social media influencers, or even open bricks-and-mortar stores, much in the way that online direct-to-consumer brands have done, for brand recognition and trust.

There is a question mark over how comfortable consumers feel with the virtual restaurant concept; a July 2020 report from Euromonitor International suggests "52% of global consumers are comfortable ordering from a delivery-only restaurant", [Euromonitor International: Ghost Kitchens Food Delivery Am in Lockdown](#).

**Examples:** Around the Cluck (owned by 12:51), Blazing Bird (owned by Las Iguanas), Mission Saigon (owned by Taster), Chick'N'Bun (owned by Feastr)

## With home kitchens

There is a subcategory of online food order and delivery platforms that offers meals from home kitchens. These vendors can cross over with event marketplaces and social sellers.



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As with the larger platforms, there is a sign-up process for cooks partnering with the platform. However, it tends to be less focused on FHRS and more on food safety qualifications. Home kitchen platforms take a commission on each order. This subsector is fairly volatile, with more businesses starting up and closing down.

**Examples:** Yummit, HomeCooked UK, All About The Cooks, Mums Bake Cakes

## With retailers

There is a growing sector of online food order & delivery platforms facilitating the sale and delivery of groceries. Unlike with online retailers, such as [Ocado](#), platforms offer on-demand delivery, rather than delivery scheduled for later in the week, and do not own the stock sold.

For on-demand grocery delivery, platforms partner with retailers or directly with brands. This offers brands a way to bypass retailers and also to test new products directly with consumers. For example, if a snack brand wants to test two recipes, it can have two different types delivered in two different areas of a city and be provided with feedback from consumers via the app, [Sifted: On demand food delivery](#).

The biggest challenge for this group is speed: their competitor is a consumer going to a store themselves, [Sifted: On demand food delivery](#). Many platforms are aiming for deliveries of under 30, or even 15, minutes.



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Consequently, platforms frequently partner with convenience stores or chains with central locations, rather than larger, out-of-town retailers.

**Examples:** Beelivery, Orders, Costcutter via Uber Eats, Shell service stations and The Co-op via Deliveroo

Other companies are combating this challenge by operating 'dark stores'. Much like a dark kitchen, they are conveniently located shops which only serve deliveries – customers cannot visit. They are sometimes known as 'local fulfilment centres'. In this case, the businesses tend to own the stock which will be sold to consumers and promise delivery in cities in under half an hour.

**Examples:** Weezy, Dija, Zapp, Gorillas, Getir

## Marketplaces

The second category of platform is the online marketplace. Where the online food order and delivery platform leans towards ready-to-eat meals and on-demand delivery, the online marketplace tends to facilitate the sale of prepackaged products and raw ingredients with scheduled delivery.

Online marketplaces can be subdivided into four categories:

1. Food marketplace
2. General marketplace



3. Social marketplace
4. Redistribution marketplace

## Food

A food marketplace essentially brings the traditional, town square marketplace of vendors online. It offers a choice of goods from multiple vendors, and many focus on local, artisan and/or sustainable producers.

**Examples:** Farmdrop, Good Sixty, CakeDrop, Yumbles, FLOC market

## Event

A food event marketplace facilitates the exchange of food services such as supper clubs, tastings and food tours. A supper club can take place in the chef's home, or that of the consumer. In most cases, the chef will provide a sample menu on the platform and then arrange the exact menu with the consumer.

**Examples:** Eatwith, YHungry, Airbnb Experiences, Bark

## General

A general marketplace facilitates the exchange of goods and services including, but not limited to, food.



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On some general marketplaces, there is a clearly defined category for food, such as “Food & Drink” on [Not On The High Street](#). However, on most general marketplaces, this is not the case, and food products sit under related categories such as “Home & Living” or “Gifts”.

On general marketplaces, the product information template must accommodate many types of product, and therefore rarely contains food-specific fields, such as allergens. Vendors can use free text fields to add information.

Some general marketplaces have specific guidelines for selling food products via their platform. For example, [eBay’s food policy](#) disallows certain high risk products and specifies requirements such as stating the product’s expiration date in the product description.

**Examples:** Amazon, eBay, Etsy, Not on the High Street, Alibaba, Down your high street, The Market Co

## Social

A social marketplace is one that sits within a social media platform, or is generally used for peer-to-peer transactions. Vendors display goods and services with prices. Some platforms have enabled financial transactions, too, such as [Facebook Shops](#). Social marketplaces operate much like general marketplaces.



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Alongside the social marketplace is another route by which food can arrive at the consumer: informal sales via social media. This takes place by direct message or in a private group. It is a more direct-to-consumer route; social media has lowered the barrier between vendor and consumer. There is very low visibility on this kind of sale and how frequently or widely it takes place. There are no clear signifiers to 'find' the digital footprint and it can be behind a wall of privacy.

In February 2020, [BBC News found multiple instances of food sales by vendors not registered as food businesses on Facebook Marketplace](#). [A Vice article describes a vendor selling hot meals on their Instagram account](#): "But outside of the Instagram bubble, there is barely a trace of Trap Kitchen". In the United States, Instagram has become a popular platform for prestigious chefs selling food during the pandemic.

**Examples:** Facebook Marketplace, Nextdoor, Instagram, Snapchat

## Redistribution

A redistribution platform facilitates the exchange of goods between vendors and consumers for discounted prices or for free. Often they aim to reduce waste by distributing surplus food, and some also look to reduce financial loss for retailers or vendors of food they can no longer sell at full price.



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The distribution process can be direct, for example, food is collected from the store by a consumer, or indirect, for example, a volunteer collects a larger amount of food and then distributes it to consumers.

The exchange can also take place between individuals with surplus food in their home. These tend to be described as sharing apps.

In interview, one such redistribution platform followed these standards, [Food in the Platform Economy: Understanding and Governing Emerging Digital Marketplaces \(PDF\)](#):

- No safety requirements for the exchange of food from individual to individual
- Any business vendors must have an FHRs rating of 3 or above
- Any volunteers distributing food from vendors to consumers must have a food safety qualification and complete a hygiene self-assessment

**Examples:** Too Good To Go, Karma App, Olio, Neighbourly, Foodcloud





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## Other new models

### Dark kitchens

A 'dark kitchen – which also goes by 'cloud kitchen', 'crowd kitchen' and 'ghost kitchen' – rents kitchen space to vendors. It has emerged as a way to:

- Increase the scale of production for bricks-and-mortar restaurants
- Produce food for (delivery-only) virtual restaurants
- Launch new concepts alongside core business

Dark kitchens often provide storage, printing facilities and specialist equipment for vendor use.

In one sense, the dark kitchen is nothing new – catering kitchens with space to rent have existed in the UK for decades, such as [Dephna](#), launched in 1972. But the term 'dark kitchen' usually refers to one with a novel angle, particularly a technology focus. Dark kitchens are far leaner than restaurant kitchens, with efficient use of space, equipment and staff. One site can produce more than 2,000 meals each day – far more than the average high street restaurant, [Forbes: Deliveroo's Virtual Restaurant Model](#).



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The model remains capital intensive as it requires property ownership or leasing. However, it does begin to tackle one of the largest challenges of delivery platforms: when people don't order food online, it's normally because it's too expensive. The dark kitchen reduces production costs by removing the front-of-house element of a restaurant. It also reduces delivery times by setting up in high demand areas and designing the kitchen for rapid production and packaging. The cost of a meal produced in a dark kitchen can be 25% less than that of one produced in a restaurant kitchen – a saving that can be passed onto the consumer, [Sifted: What's next for on-demand food delivery?](#).

**Examples:** Karma Kitchen, Dephna, Kitchup, Foodstars, Kitopi

A subset of dark kitchens are owned by and/or associated with an online food order and delivery platform. Vendors who produce food here are normally required to operate exclusively with the platform. In the UK, [Deliveroo](#) is the main actor with its series of Deliveroo Editions made up of 'Roo Boxes'. Deliveroo doesn't charge rent for this kitchen use, but will take up to 40% of turnover made by the restaurants, [Sifted: What's next for on-demand food delivery?](#). [Uber Eats opened a trial dark kitchen in 2018](#) but has since chosen not to expand into the space.

**Examples:** Deliveroo Editions, Glovo Cook Rooms (Europe)

There is a lot of innovation in the dark kitchen sector in its current phase. Of interest is a 'franchise' model, such as [Kbox](#), in which a business finds



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and sells to kitchens with additional capacity (space and staff). The business provides either frozen meals or instructions to those kitchens, and the kitchen handles preparation, cooking and delivery to consumers. This will be for a delivery-only brand, chosen for its likely appeal to consumers in that area. It's becoming popular in suburban areas or smaller cities, where the range of cuisine in traditional restaurants is currently smaller, and differs from a dark kitchen, because the business does not own or lease the physical space.

## Direct-to-consumer model

In the direct-to-consumer (DTC) route, food businesses have followed other industries in cutting out the retailer step of selling to consumers. The majority of DTC vendors launch online, rather than with physical stores, although they may go onto open shops or restaurants in order to increase brand awareness.

DTC vendors can control the end-to-end process of creating, marketing and distributing the goods they sell. This can reduce the cost of the product to the consumer. By bypassing the retailer, they also avoid competition at the point of sale. Leading DTC brands outside the food space include [Glossier](#) in beauty, [Tails](#) in pet care and [Bloom & Wild](#) in floristry, [Born Online: Unwrapping the Direct to Consumer brands reshaping retail](#).



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The past five years has seen large scale growth in two DTC sectors in particular:

## Meal plans

In this model, vendors deliver prepared meals to consumers. There are options to tailor the meals according to preference and dietary requirements, and the menu changes regularly. Meals are refrigerated or frozen, and often delivered in a manner which maintains their freshness for most of a day, so that a consumer does not have to be at home when the delivery takes place.

**Examples:** Chefly, The Detox Kitchen, Allplants, Pasta Evangelists, Prep Kitchen

## Recipe boxes

In this model, vendors deliver ingredients to consumers, along with the instructions required to complete the preparation of the meal. Ingredients are raw but pre-portioned to reduce the time required to cook a fresh meal at home.

A large number of restaurants have expanded into direct-to-consumer recipe box sales during the Coronavirus (Covid-19) pandemic, [I news: Meal kits are a ray of hope for restaurants and for frazzled home cooks wanting a treat](#). For example, burger chain [Patty & Bun](#) launched an at-



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home burger making kit, and Taiwanese restaurant [BAO](#) did the same for bao buns.

**Examples:** Hello Fresh, Gousto, Mindful Chef, Little Cooks Co, Feast Box

Both the meal plan and recipe box models are focused on saving consumers time. They usually work on a subscription basis, where the consumer pays the vendor a sum each week or month for a set number of meals. Menus are displayed online, with a degree of choice in which meals are selected.

This is a very busy space, and many of the vendors have a unique selling point around one of the following:

1. Cuisine-focused
2. Health-focused
3. Child-focused

A related sector which has grown rapidly is the wholesaler-to-consumer route:

### Wholesaler-to-consumer

Wholesalers have seen their core revenue from selling to shops and restaurants severely affected by the closures that have taken place during the Coronavirus (Covid-19) pandemic. As a result, some wholesalers have pivoted their model to a DTC one to meet continued



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demand from the many consumers whose access to supermarkets has been limited, both in person and online.

**Examples:** The Sausage Man, LWC Drinks, Bidfood, Brakes, The Good Egg Fellas, The Fine Cider Company

## Delivery and distribution

Platforms provide technology and services to enable delivery and distribution of food, but these are also available without operating via a platform.

## Technology

Restaurants and shops aren't traditionally tech savvy, so businesses have developed software for them to use. This technology enables the restaurant to adapt their website to receive orders from customers, manage incoming orders and connect online ordering with their payment system. It may also offer reporting on the restaurant's efficiency and customer satisfaction.

The software can be provided by platforms as part of their service, such as Restaurant Manager at [Uber Eats](#) or Practi at [Just Eat](#). Alternatively, it can be independently owned, such as [Slerp](#), which was set up by the founders of London-based doughnut vendor Crosstown Doughnuts.



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Some of these businesses are specialising for the food industry. For example, [Kafoodle](#) offers products which enable vendors to create interactive menus for personalised diets, with search and filters for allergens.

**Examples:** BistrotHub, GloriaFood, Flipdish, Order Tiger, Kafoodle, Practi, Restaurant Manager

## People

The delivery of food, particularly on-demand, requires a large number of people. In the case of online food order and delivery platforms, these are often bicycle or motorbike couriers, whereas in marketplaces it's more likely to be delivery drivers.

Some businesses have become delivery experts, with networks of couriers to support restaurants or shops delivering food. They partner with vendors and/or platforms.

Most online food order & delivery platforms have their own pool of drivers or riders. In most cases, they are part of the gig economy – self-employed and described as 'partners' or a 'pool' or 'network', although this may be changing. The platform provides them with branded goods and insulated bags and carries out light training such as a food hygiene video. The drivers are considered responsible for food safety in most cases.



**Examples:** Stuart, Uber couriers, Quiqup

## Supply chain visibility

Alongside the technology focused on delivery and distribution, we're seeing an increase in technology used for supply chain visibility. It aims to make data about the supply chain visible to stakeholders and to the consumer.

**Example:** Provenance, Everledger





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## How are they reshaping the food landscape?

The UK is the largest online food delivery market in Europe, with 35% of people ordering food or groceries online at least once in 2017 compared to an average of 24% in other countries in the European Union at the time, [Platformization in Europe \(PDF\)](#).

It has a locally platformized food delivery industry, which means that it has a high degree of platformisation – for example, business conducted via platforms – by local (EU-based) platforms, rather than global ones.

The platformisation of the industry has inevitably impacted the food world more broadly.

## Technology businesses in the food world

Technology businesses from outside the food world are now operating inside it. For example, [Uber](#) – a technology business that launched in transport – now facilitates hot meal deliveries from restaurants to consumers.

Another way to describe these businesses is ‘asset light’ – they don’t own the assets (in this case, food) being exchanged on their platform. This means they differ from the type of businesses operating when the food regulatory system was designed.



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This kind of technology business is likely to be operating in multiple verticals – food and other goods, or food and transport, or food and health. As such, they are likely to interact with multiple arms of government, both local and central, and other bodies in each vertical. They are trying to optimise their business model by reducing friction in all verticals, and often internationally.

## Supply chain rearranged

Platform businesses and other new models can disrupt the traditional stages of production and distribution by ‘bundling’ and ‘unbundling’ steps in the supply chain.

The direct-to-consumer model ‘skips’ a step, by selling food products directly to the consumer online, rather than via a retailer or physical store. This can enable direct dialogue between consumers and vendors, but also removes the ‘hub’ in the interaction which might have offered standardisation or ‘gatekeeping’ of some kind.

Redistribution platforms, in contrast, ‘add’ a step, by sharing food products after they have already been presented for sale in a store. This can add complexity to traceability and accountability.

Some platforms aggregate steps, such as expanding up the supply chain into the dark kitchen space, while others disaggregate steps, such as offering ordering services but no delivery.



## Online-as-default businesses

Direct-to-consumer brands and platform businesses tend to be digitally native, or 'online first'. Rather than adapting to the digital era, they were designed and launched within it.

As such, their business practices are designed for digital, rather than reworked from physical premises.

## Supply chain data

As intermediaries, platform businesses collect and store a huge volume of information about how the vendors operating on their platform work. Many platforms provide hardware and software – a tablet with an ordering application – to vendors, where perhaps before that information may have been processed manually, or not at all.

For example, platforms might track how many orders were made for each dish, how long a courier spends waiting to collect an order, how long it takes to deliver that order to a consumer's house, any complaints the consumer made, and what else they had ordered that week.

Smart kitchens use technology to improve the efficiency of the kitchen, make cost savings and reduce environmental impact. To do this, they generate data around the activity of the kitchen, including by weighing waste and assessing its contents in order to minimise it in future.



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## Increased interconnectedness

The arrival of platforms has increased the number of connections between food businesses. Each vendor may operate on multiple platforms, and each platform may partner with thousands of vendors. Consumers may also be using multiple platforms.

These connections can be an opportunity. For example, a platform can act as a 'hub' for the 'node' vendor businesses, sharing updates with the network via email newsletters or notifications in software.

## Ever-adapting business models

Digitally native businesses are more able to pivot their model in response to market or regulatory changes because they are asset light and able to test new concepts quickly.

As such, there have been major business model evolutions or adaptations in platform businesses operating in the food world. For example, [Amazon launched Amazon Restaurants in 2016, which was closed in 2018 purportedly due to an overcrowded market. It is now making a large investment in Deliveroo.](#)

Another example is Uber Eats, which [opened a dark kitchen in Paris in 2018 before closing it and deciding not to expand into the space.](#)



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This level of adaptation has been seen across the food landscape during the Coronavirus (Covid-19) pandemic. Many restaurants have launched DIY meal kits, click and collect, or joined delivery platforms in the space of weeks.

## Faster emergence and change

The expansion of platform businesses, ordering software and delivery services have lowered the barriers to entry for the food market.

A restaurant can be set up on an on-demand delivery platform in less than a week. They can hire space from a dark kitchen on an hourly basis, and use staff and equipment from that kitchen. This brings the set-up time and prerequisite knowledge and funding down substantially.

These reduced entry requirements mean that vendors can test out new markets or verticals at a lower risk to their business.

This also applies to the less formal side of the market; individuals can sell food from their home on a platform without meeting any prerequisite criteria.

## Decreased visibility of business identity

When consumers look 'up' the supply chain, it can be difficult to see how the food has reached them as the consumer. For example, a virtual brand might not have a visible presence so it's not clear where the food was



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prepared. An individual might sell food via a platform with no identifiable location or business identity.

In other examples, making it clear where the food comes from is a selling technique. For example, food-specific scheduled delivery platforms often focus on the 'story' of their producers, as well as their ecological credentials.

### Private standard setting

It is increasingly apparent that platform businesses can have quasi-regulatory powers in the market. For example, they can specify which criteria a vendor must meet in order to operate on their platform. Platforms may also monitor the activity of vendors on their platform, and there will be consequences for breaking contractual agreements.

In some markets, one or two platforms dominate, meaning that their sway over the vendors is large. Platforms differ as to what extent they curate the vendors operating through them – high curation platforms might send their own staff to visit vendor premises or use other data sources, such as reviews, to inform decisions, [Food in the Platform Economy: Digital Food Marketplaces for Unconventional Food Entrepreneurs](#).



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How do they compare to other large businesses?

Mature platform businesses share some characteristics with large, digital-second businesses, and particularly large retailers or chain restaurants.

### Larger retailer/Chain Headquarters and Online Platform Headquarters

- In most cases, does not have an on-the-ground presence handling food directly but acts as a hub for many node shops or restaurants.
- Controls the incident management process for stores and designs and manages a feedback loop to the hub
- Collects & stores large amounts of information about node food businesses and uses it to optimise performance and inform business change
- Deals with multiple regulators for multiple verticals and from international jurisdictions
- May deal with third party delivery partners and/or suppliers
- Creates or customises software and hardware that must be used by node shops or restaurants in order to operate their business.

### Larger retailer/Chain Headquarters:

- Clear chain of command for designing and imposing standards
- Owns the stock handled by node shops and restaurants
- Better known and understood model.



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### Online platform Headquarters:

- Control over conditions of operating on the platform but not a clear chain of command
- Does not own the stock handled by node shops and restaurants
- Newer, less understood model



## Glossary

Term	Definition
Consumer	An individual who buys goods or services for use or consumption
Dark kitchen	An industrial-style kitchen with space and equipment available for vendors to rent; often located in cheaper, less desirable locations (not on the high street), including in car parks and industrial estates
Dark store	A 'shop' that stores goods exclusively for delivery in convenient locations
Direct-to-consumer (DTC)	A business model in which the vendor sells directly to the consumer, rather than via a retailer or platform
Event marketplace	A marketplace situated within social media that facilitates the exchange of goods between primarily individual vendors and consumers
Food marketplace	A marketplace that facilitates the exchange of food between vendors and consumers
General marketplace	A marketplace that facilitates the exchange of goods – food and non-food – between vendors and consumers
Gig economy	A market in which services are commonly provided to a business' clients by self-employed contractors in short-term, low-commitment agreements
Home kitchen	A vendor that produces food for sale and consumption in a residential setting
Meal plan	A delivery of one or more prepared meals, normally

Term	Definition
	direct from the vendor to the consumer
Network effect	The phenomenon in which a platform gains additional value when more people use it
On-demand delivery	The immediate delivery of goods from a vendor to a consumer when requested, normally within an hour
Online food order & delivery platform	A platform that connects vendors to consumers via a website or app for the on-demand order and delivery of food
Online marketplace	A platform that connects vendors to consumers via a website or app for the exchange and scheduled delivery of goods or services
Platform	A technology business that facilitates the exchange of goods and/or services between vendors and consumers, without taking ownership of or handling the goods
Recipe box	A delivery of prepared ingredients, accompanied by a recipe, to make one or more meals, normally direct from the vendor to the consumer
Redistribution platform	A platform that facilitates the exchange of surplus goods between vendors or retailers and consumers, often for free or at discounted prices
Retailer	A business that buys goods and services from vendors and sells them to consumers

Term	Definition
Scheduled delivery	The delivery of goods from a vendor to a consumer in a particular time bracket, normally of one day
Social marketplace	A marketplace situated within social media that facilitates the exchange of goods between primarily individual vendors and consumers
Supper club	An event in which a vendor cooks a meal for consumers, often in their home or an alternative location
Vendor	An individual or business offering goods or services for sale, taken here to represent the whole range of vendors (restaurant, cafe, shop, farm, factory, home kitchen, mobile caterer, etc)
Virtual restaurant	A vendor that produces food exclusively for delivery, with no storefront or eat-in option