



# final report

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## Emerging Food Delivery Modes

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## Executive summary

Once dominated by traditional bricks and mortar retail and food service stores, the food market is evolving with a range of emerging food delivery modes to reach consumers. These modes are typically distinguished by direct deliveries to the home or the workplace, and lever off a technology enabling interface, such as the internet. Providers in these emerging delivery modes are able to capture or add value in a number of ways, including completely skipping channels and enhancing product into a consumer-ready form.

This project identifies and assesses local and global food market trends and the status of emerging food delivery modes in the Australian market, in order to inform red meat stakeholders of their commercial potential. This was undertaken to demystify these new distribution options and inform development decisions.

The analysis utilises all available data including consumer data gathered by the Freshlogic operated Mealpulse™ food consumer panel, Freshlogic market knowledge and models, and extensive publicly available information including current examples of domestic and international operators.

The project analysis and findings are divided into two sections:

1. Changing food market settings - which includes a discussion of new business models, the role of technology, the size and impact of online marketplaces, changes in consumer attitudes and behaviour, and an assessment of the size and nature of emerging delivery modes by segment including grocery and specialist, meal plans and meal kits, home delivered restaurant meals, and self-serve or vending.
2. Detailed analysis and profile of 13 individual emerging food delivery modes of relevance to red meat stakeholders – which includes key features, stock and communication flow, where new value is being captured, where pressure points exist, and local and global examples.

Key overarching challenges associated with these emerging food delivery modes include scale and logistics, while key overarching opportunities include:

- Utilising more direct channels and interfaces with the consumer.
- Utilising consolidated and aggregated offer-platforms and logistics services.
- Telling the brand and provenance story to generate acknowledgement of product quality and create value.
- Utilising communications technology use and capture.

This project has identified and framed the nature of the changes to the food market, delivered a detailed profile of the most relevant emerging food delivery modes, and provided overarching and specific opportunities and challenges associated with these modes. It is now at a stage where the project findings and outputs can be taken up by commercial enterprises to explore specific opportunities and make informed decisions about their commercial viability.

It is expected that the outcomes of this project will enable informed decision making by commercial enterprises regarding specific potential opportunities. These enterprises may capture economic benefit by creating additional value and enhancing their product offer to better meet consumer demand.

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# 1 Background

Once dominated by traditional bricks and mortar retail and food service stores, the food market is evolving with a range of new pathways emerging to reach food consumers.

Currently, most food is delivered from supermarkets and restaurants. We are now seeing ways that are changing consumer behaviour and shopping trips, by taking these goods direct into the home including; retailers and other supply chain stakeholders selling direct to domestic and international consumers, home delivered meal kits and meal plans, home delivered hot restaurant meals, and self-serve or vending. Red meat can be delivered through all of these modes, sometimes on its own, but often in combination with other food, and even non-food items.

These emerging food delivery modes are typically distinguished by direct deliveries made to the home or the workplace, and lever off a technology enabling interface, such as the internet. Providers in these emerging delivery modes are able to capture or add value in a number of ways, including completely skipping channels and enhancing product into a consumer-ready form.

The purpose of this project is to identify and assess trends and impacts of emerging food delivery modes in the Australian market. This includes domestic and relevant global trends and their likely impact. The outputs from the project will define, quantify impacts, assess viability and map out what these channels will require from all stages in red meat value chain, if they are to be used.

Targeted project outcomes are centred on accelerating investment decisions in commercial opportunities that have clear scope to provide incremental value capture.

The aim of the project is to assess local and global food markets trends, to identify and assess the status of new and emerging food distribution channels in order to inform red meat stakeholders of their commercial potential. This will be done with consideration to demystify these new distribution options and inform development decisions.

The project seeks to add value by accelerating the assessment of new distribution food channels, ranking identified opportunities, and identifying key risks in order to clarify their commercial merit within the Australian and key global markets. It aims to enable the red meat industry to make more commercially feasible and informed investment decisions by highlighting what success looks like in new markets and defining the scope of value capture by meeting consumers' unmet needs.

## 2 Project objectives

The three main objectives of this project are outlined below.

1. **Undertake local and global food market research** to identify and assess new and emerging distribution channels and their capacity to distribute red meat to consumers. In particular:
  - a. Assess all available food research on new and emerging distribution channels globally and specifically, in Australia.
  - b. Assess and consolidate the learnings from the Australian consumers data gathered in the Mealpulse™ food panel over the last 5 years.
  - c. Assess and profile the commercial viability of these channels and major contributing factors to this viability.
2. **Develop a series of interim deliverables that include:**
  - i. Key delivery trends globally, and their status and latent potential in the Australian market;

- ii. How fresh and prepared red meat is managed through the value chain of these channels;
- iii. The stages and activities in the value chain where red meat stakeholders can influence their value capture;
- iv. Define the core capabilities these new channels bring and require to effectively distribute red meat;
- v. A ranking of any identified opportunities and the red meat value chain stages and participants that have potential to be involved; and
- vi. A concise set of fact sheets and PowerPoint deck that headline from the content profile of i to v above.

**3. Compile a concluding final summary report that includes:**

- a. A set of recommendations for how the red meat sector could look to capture high value opportunities from these trends.
- b. A prioritised set of investable opportunities to explore with industry partners.
- c. Prepare and deliver final report in required MLA format.

### 3 Methodology

The methodology is centred on research and analysis of available data. Wherever relevant, this includes analysis of both Australian and global trends and features.

Analysis of data includes access to the Australian market consumer data gathered by the Freshlogic operated Meulpulse™ food consumer panel. This independent panel, with 10 years of analysed history, captures food related attitudes, buying behaviour and consumption habits of Australian households.

This report also includes analysis of other relevant data such as NAB Online Retail Sales Index, information on company websites, media releases, news articles, financial reports and other publicly available information relating to size and growth of individual companies e.g. Amazon, Alibaba, and Hello Fresh. It also draws on Freshlogic's market models and expertise in food market trends, growth and size of key companies and food distribution channels, as well as resulting implications for stakeholders.

The project analysis and findings are divided into two sections:

- 3. Changing food market settings (See Appendix 1). This includes discussion of:
  - New business models distinguished by direct deliveries to the household
  - The importance of technology as the key enabler
  - The size and impact of online marketplaces
  - The influence of broader market setting such as demand for convenience and interest in health and reduced home waste
  - An assessment of the size and nature of the emerging delivery modes in the following segments; grocery and specialist, meal plans and meal kits, home delivered restaurant meals, and self-serve and vending.
- 4. Detailed analysis and profile of 13 individual emerging food delivery modes of relevance to red meat stakeholders (see Appendix 2 for an example profile).
  - Each emerging delivery mode is profiled over two pages and includes, key points of differentiation, the flow of stock along the supply chain, the flow of communications with the consumer, identification of where new value is being captured and where pressure points exist. This is supplemented by domestic and international examples.

Each delivery mode profile also identifies the potential opportunities and challenges for stakeholders.

- The 13 emerging food delivery modes captured by this analysis are listed in Table 1 below.

**Table 1. Emerging food delivery modes profiled in detail**

Category	Emerging food delivery mode of relevance to Australia's red meat industry	Industry examples
<b>Grocery, specialist &amp; other</b>	1. Existing bricks and mortar supermarket retail offer, ordered online, delivered to the home, facilitated by the retailer	Woolworths and Coles online
	2. Existing bricks and mortar supermarket retail offer, ordered online, delivered to the home, facilitated via personal shopper	ShopWings - personal shopper model incorporating various local retailers with consolidated delivery
	3. Fresh food and grocery offer, ordered online, delivered to the home, using central warehouse and distribution	Amazon Fresh
	4. Specialist retail offer, ordered online, delivered to the home, facilitated by the specialist	Bricks and mortar retailer or pure play online retailers, offering online order and home delivery
	5. Specialist retailer offer sold via collective online market, with individual home delivery	Farm House Direct - collective online marketplace with coordinated order and payment systems, but retailers responsible for delivery
	6. Specialist retail offer sold via collective online market, with coordinated home delivery	ButcherMan - collective online marketplace with coordinated order, payment and delivery system
	7. Bulk offer delivered to the home	Specialist, producer or wholesaler offering home delivery of bulk red meat
	8. Exporter direct sales to international homes	JC.com - collective online marketplace offering sales and delivery of fresh chilled meat direct to Chinese households
<b>Meal plans &amp; kits</b>	9. Meal plans delivered to the home	Lite N Easy, YouFoodz and Jenny Craig
	10. Meal kits delivered to the home	Marley Spoon and Hello Fresh
<b>Home delivered restaurant meals</b>	11. Local restaurant providing hot ready meals direct to household	Local restaurant or chain, where orders and delivery undertaken by the restaurant
	12. Hot restaurant meals delivered to the home via third party	Deliveroo and UberEats, with order, payment and delivery facilitated by a third party
<b>Self-serve</b>	13. Self-serve or vending	Meals or snacks available by self-serve or vending.

## 4 Results

### 4.1 Key findings and implications for the Australian red meat industry

Table 2 below outlines the key findings and implications for the Australian red meat industry, identified as a result of analysis into the changing food market settings.

**Table 2. Key findings and implications for the Australian red meat industry**

Key Findings	Implications for the Australian red meat industry
<ul style="list-style-type: none"> <li>⇒ Emerging delivery modes are distinguished by direct deliveries to the consumer and lever off a technology enabling interface. They enable new ways to add and capture value such as channel skipping and enhancing products into a consumer-ready form.</li> <li>⇒ Global online marketplaces such as Amazon offer ‘virtual’ shopping centres and have reduced barriers to entry providing a kick start to small businesses. The size and speed with which these marketplaces have grown points to the potential impact of this emerging delivery mode.</li> <li>⇒ The arrival of Amazon has the potential to significantly impact in the Australian food market, supported by technology and infrastructure to support the speed and efficiency of home delivered food. While it may negatively impact some food market stakeholders, stakeholders who realign their business models or partner with Amazon have the potential to benefit.</li> </ul>	<p>There are a number of large technology enterprises that have created platforms as well as businesses.</p> <p>They have potential to change many aspects of how goods and services are purchased and distributed.</p> <p>They have served to aid new entrants and small enterprises and have largely created competitive pressure for existing retailers.</p>
<ul style="list-style-type: none"> <li>⇒ Emerging delivery modes are being driven by consumer demand for convenience, and enhanced by an interest in health and food provenance, a desire for reduced waste, and demand for quality casual dining including hot restaurant meals delivered to the home.</li> </ul>	<p>Enough consumers have used the tech enabled home delivery services to indicate they will increase.</p>
<ul style="list-style-type: none"> <li>⇒ In comparison to the way grocery discounters Aldi and Costco impacted the retail market, after gaining 9-10% market share over a 15-year period, growth in the online share of grocery spend could well generate a stronger impact in a much shorter timeframe.</li> </ul>	<p>The enterprises and business models driving the change are not dependent on building infrastructure to expand as other new entrants have been.</p>
<ul style="list-style-type: none"> <li>⇒ Providers of meal plans and meal kits have overcome many of the issues with delivering sensitive fresh foods into the home, and now have a varied and extensive offering. This segment is attracting new entrants and enjoying growth.</li> </ul>	<p>The range of benefits provided in meal kit offer has worked well with some consumer segments.</p>
<ul style="list-style-type: none"> <li>⇒ Ordering apps, improved delivery and take up by tech savvy customers is resulting in food service putting increasing pressure on retail, and ultimately gaining share of stomach.</li> </ul>	<p>Ordering apps have harnessed latent food service potential and generated strong growth.</p>
<ul style="list-style-type: none"> <li>⇒ The growth in vending is leveraging off familiarity with ‘self-serve’ checkouts across retail – which is now a mainstream shopping experience. It is also supported by enhanced vending technology and the associated improvement in</li> </ul>	<p>Vending could well be poised to tip into a more acceptable way to buy food for Australian consumers.</p>

quality and range of food on offer. Vending machines have evolved into solutions to extend trading hours, and to offer 'self-serve cafes' in high traffic locations including workplaces, often leveraging off an existing supply chain and a solution to restock.	
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## 4.2 Potential challenges and opportunities associated with emerging food delivery modes

There are a number of overarching challenging and opportunities for Australian red meat stakeholders, that are commonly associated with many emerging food delivery modes. These are discussed in more detail below. In addition to this, the specific opportunities and challenges associated with each of the 13 individual delivery modes are identified in Appendix 2 Full Detail.

### 4.2.1 Key overarching challenges

Scale and logistics are the most significant and likely challenges to be faced by supply chain stakeholders taking up opportunities associated with emerging food delivery modes. These are outlined below:

- Scale
  - Establishing and maintaining sufficient scale of demand is required to ensure ongoing efficiency and profitability.
- Logistics
  - There are significant resources associated with establishing consumer-based packaging and establishing a transport and delivery solution, as well as significant labour and transport costs. There are also challenges of balancing demand within supply windows, while also seeking to meet customer preferences for delivery times and modes.

However, the consolidation and expansion of larger technology and logistics companies such as UberEats and Amazon offers a potential solution, bringing improved efficiencies, reducing the impact of scale for individual stakeholders, and established logistics infrastructure and expertise. This is discussed in more detail below.

### 4.2.2 Key overarching opportunities

The main opportunities for red meat stakeholders associated with emerging food delivery modes are summarised below:

- **Utilising more direct channels and interfaces with the consumer.**
  - This provides the opportunity to capture a greater proportion of the end selling price, by skipping traditional channels. This is especially relevant where the producer or supplier is able to establish and gain acknowledgement for higher product quality.
  - It also provides an interface for two-way communication with the consumer, offering scope to build relationship and loyalty. It can provide feedback, enabling the provider to be more informed, and use that information to develop an enhanced offer based on consumer preferences.
  - This opportunity is of most relevance to stakeholders further back in the supply chain, as they have the greatest opportunity to benefit.



- Skipping channels has to be balanced with the incremental costs involved, however, utilising consolidated platforms and services provides a potential solution.
- **Utilising consolidated and aggregated offer-platforms and logistics services.**
  - Consolidation and aggregation has resulted in reduced costs for providers, as much of the infrastructure and support already exists. These consolidated platforms and services solves key weaknesses of smaller operations and emerging food delivery modes.
  - It also enhances the consumer experience, for example by providing a consolidated delivery from multiple providers as opposed to many individual deliveries. We are reaching a tipping point of scale, where it is now viable.
  - This opportunity is of relevance to everyone, but is particularly useful for smaller producers and specialists who do not have internal resources or expertise in this area. One of the main challenges of the emerging food delivery modes is logistics and delivery, particularly where scale is small and profitability and viability is significantly challenges by delivery costs. Being able to utilise consolidated services can offer efficiencies for the stakeholder and improved service experience for the consumer.
- **Telling the brand and provenance story to generate acknowledgement of product quality and create value.**
  - This helps to stimulate demand and enables quality credentials to be acknowledged to a degree where a higher price per kg can be achieved, in what is often a competitive market.
  - By incorporating quality product, it helps distributors create a point of difference in their own offer, many of which are currently weak on fresh food credibility. In turn, the distributors (e.g. meal plan providers) become the promoters of the brand. This has most relevance in a premium offer.
  - Currently this is most apparent among producers selling direct to consumers, however there may be opportunities for other modes to do this, e.g. meal plan and meal kits, and even restaurants who want to promote brand and provenance to leverage into a higher quality offer.
  - This opportunity is enabled by communication technology (outlined below) that has significantly enhanced the ease of telling the story and ability to reach lots of consumers, making the return on this investment positive.
- **Utilising communications technology use and capture.**
  - Communications technology is an enabling platform that supports selling, marketing, ordering, payment, and order tracking and differentiates this mode from traditional bricks and mortar. By making these processes easier, and in many cases automating them, it has levelled the playing field for small players.
  - In other areas, investments already made by large enterprises (e.g. Google), means the investment required by individual businesses is lower (e.g. operators can utilise Google Maps which is essentially free, to arrange orders and coordinate delivery).
  - This opportunity is of relevance to businesses of all sizes, but is of particular relevance for smaller stakeholders who do not have existing infrastructure or expertise in this area. This technology offers a streamlined process for stakeholders, and easy navigation and functionality for the consumer. It also offers the opportunity to develop and automate customer profiles and marketing functions, and enables gathering of useful feedback and customer information for targeted promotions and an enhanced product and service offering.

## 5 Discussion

This project has established a comprehensive profile of the emerging food delivery modes of relevance to the Australian red meat industry. It has also established the need for action by red meat stakeholders by outlining the size, nature and potential impact of the changes, together with the potential challenges and opportunities associated with engaging in these emerging food delivery modes.

Practical implications for business are captured in Section 4 above, which details key findings and implications, and key challenges and opportunities for the Australian red meat industry.

Two of the biggest areas for potential impact include (a) the arrival of Amazon to Australia and its potential expansion into Amazon Fresh, and (b) the ongoing evolution in direct sales to international households via consolidated online marketplaces and logistics solutions. It would be valuable to review these two emerging food delivery modes – particularly the arrival of Amazon - once more is known about the size and nature of the arising opportunities and challenges.

The project objectives have been met, as outlined below. Note, full details of the objectives are found in Section 2 above.

### **Objective 1: Undertake local and global food market research to identify and assess new and emerging distribution channels and their capacity to distribute red meat to consumers.**

- This objective has been met through analysis of global and domestic market changes and enablers including the assessment of major online marketplaces (e.g. Amazon and Alibaba), communication of relevant statistics to indicate the size and nature of the changes, and an extensive profile of current domestic and international examples within each emerging delivery mode. All available data and learnings from the Australian consumer data gathered through Mealpulse™ food panel were also incorporated.
- The commercial viability of specific opportunities is profiled in terms of areas of new value capture and pressure points, as well as a summary of specific challenges and opportunities relating to individual delivery modes (see Appendix 2 Full Details). It is also covered in the overarching challenges and opportunities relating to many delivery modes (See Section 4 above).

### **Objective 2: Develop a series of interim deliverables.**

- This objective has been met through the discussion of key delivery trends and of the profile of individual emerging delivery modes. The profile of modes maps out the supply chain product flow, communication flow with consumers, and stages where additional value can be captured (see Appendix 2 Full Details). The core capabilities have been conveyed in the discussion of overarching challenges and opportunities (see Section 4), as well as in the discussion of overall market changes and role of technology as an enabler (see Appendix 1).
- A set of PowerPoint slides outlining key findings have been delivered. All 13 delivery modes have been assessed, and those deemed to provide the most relevant opportunities have been converted into stakeholder factsheets. The inclusion of only the most relevant opportunities, provides an indication of opportunity ranking.

### **Objective 3: Compile a concluding final summary report**

- This objective has been met through the provision of a final report in MLA format, including key findings, opportunities and recommendations for the red meat industry.

- The detailed research and analysis findings can be found in the final report, Appendix 1 and Appendix 2 Full Detail.
- This project provides information to inform stakeholders about the market changes occurring, and the opportunities and challenges that may impact their commercial merit. It aims to support informed investment decisions by highlighting what success looks like and defining the scope of value capture by meeting consumers' unmet needs. This information is designed to be taken up by stakeholders to support strategic decision making.

## 6 Conclusions/recommendations

The overall conclusions and recommendations include:

- The food market is changing, with potential for these changes to be significant and rapid. There is now a range of new and emerging food delivery modes, which present both opportunities and challenges of relevance to red meat stakeholders.
- This project has identified and framed the nature of the changes and associated opportunities and challenges. It is now at a stage where the project findings and outputs can be taken up by commercial enterprises to explore specific opportunities and make informed decisions about their commercial viability. In practical terms, the PowerPoint presentation and stakeholder factsheets can be used to assist with this process, along with any further advice or interpretation assistance required by the project author.
- The most significant areas for potential impact should be monitored, i.e. (a) the arrival of Amazon to Australia and its potential expansion into Amazon Fresh and (b) the online evolution in direct sales to international households. Where relevant, findings and implications should be reviewed to assess any additional information regarding the specific size and nature of arising opportunities and challenges, as these delivery modes evolve.
- Conclusions and recommendations arising from this project are also covered in Section 4 (Results) and in Section 7 (Key Messages).

## 7 Key messages

Key messages for the Australian red meat industry include the following:

- Once dominated by traditional bricks and mortar retail and food service stores, the food market is evolving with a range of new pathways emerging to reach food consumers. The resulting changes have potential to be significant and may occur rapidly.
- Red meat stakeholders should use the project findings to become informed about the size and nature of these changes, the key drivers including changing consumer attitudes and preferences, and the range of apparent opportunities that these changes offer. This includes understanding:
  - The size, scale and nature of changes within the different categories e.g. grocery and specialty including export sales, meals and meal kits, home delivered restaurant meals, and self-serve.
  - The nature and impacts of similar changes globally e.g. Amazon Fresh.
  - The important role technology plays as an enabler – for both consumers and supply chain stakeholders.

- The range of opportunities and associated challenges associated with these emerging food delivery modes.
- Red meat stakeholders should utilise project findings to identify and investigate opportunities of relevance to their own business, and make their own assessment of associated risks and challenges, in order to determine commercial viability. This may vary depending on market focus, product form, and business type, size and location of each individual stakeholder.
- The exact resulting benefits to producers or processors from exploring opportunities may vary considerably depending on their circumstances and commercial arrangements, but are likely to be economic in nature, and may assist their ability to remain competitive by creating additional value and enhancing product offer to better meet consumer demand.
- Red meat stakeholders should also seek to understand the value and potential of direct communication with and feedback from consumers, and ensure some level of engagement. Doing so may enhance opportunities to build relationships and brand loyalty, clearly communicate points of differentiation and quality credentials, and also gather valuable feedback regarding consumer preferences and behaviour in order to build its market base and enhance product offering.

## **8 Appendix**

Appendix 1 captures the analysis relating to the changing food market settings and impact.

Appendix 2 gives an example of a profile for an individual emerging delivery mode.

## 8.1 Appendix 1 – Changing food market settings

### 8.1.1 The business model used by emerging food delivery modes

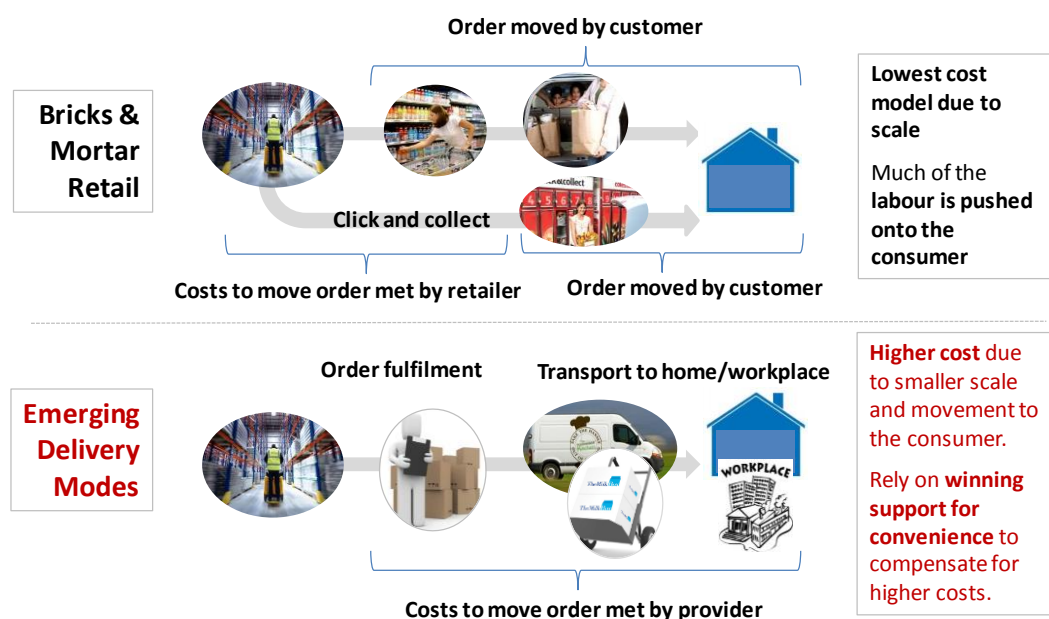
Once dominated by traditional bricks and mortar retail and food service stores, the food market in Australia, and indeed globally, is evolving with a range of new pathways emerging to reach food consumers. Growth in these emerging delivery modes has been enhanced by positive online shopping experiences with general merchandise such as books and clothing, providing shoppers with confidence to expand into general grocery and more recently, perishable foods.

Currently, most food is delivered from supermarkets and restaurants, where the consumer goes to bricks and mortar outlets, and selects or packs the food, before transporting it home. We are now seeing ways that are changing consumer behaviour and shopping trips, by taking these goods direct into the home. This includes; retailers and other supply chain stakeholders selling direct to domestic and international consumers, home delivered meal kits and meal plans, home delivered hot restaurant meals, and self-serve such as vending. Red meat can be delivered through all of these modes, sometimes on its own, but often in combination with other food, and even non-food items.

These emerging delivery modes are typically distinguished by direct deliveries made to the home or the workplace, and levers off a technology enabling interface, such as the internet. While some modes benefit from existing bricks and mortar networks and consumer brand loyalty, their competitive advantage does not typically rely on these traditional networks. Providers in these emerging delivery modes are able to capture or add value in a number of ways, including completely skipping channels – such as a red meat producer or wholesaler selling and delivering direct into the home – and enhancing product into a consumer-ready form.

Fig. 1 below outlines how the business model used by emerging delivery modes differs from that used in traditional bricks and mortar retail. The emerging modes, with direct delivery to home and the workplace, have different logistical structures and challenges from the bricks and mortar business model. They also have higher costs associated with packing and delivery, and rely on winning support for convenience and on capturing sufficient value to offset the additional costs.

**Fig 1. Comparison of Business Models**



Source: Freshlogic

### 8.1.2 The enabling power of technology

**Technology is the most significant enabler** of the emerging delivery modes. At the broadest level, this is being driven by the tech giants, who are establishing new businesses (including warehouse and logistics) and creating very large platforms. These platforms are essentially creating large, virtual marketplaces, enabling both existing and new enterprises to sell and deliver direct to the home. Some of the largest tech giants include Google, Amazon and Alibaba. The size and impact of these giants is discussed in more detail in the following section below.

The enabling power of technology is supported by the penetration of mobile devices and internet access and speeds. Deloitte estimates Australian smartphone penetration to be 84%. The penetration rate rises to 94% for those aged between 18-24. Internet access and speeds will continue to improve with the NBN rollout and any future improvements. The prevalence of mobile devices has seen online transactions increasingly move from the home computer or laptop to mobile device, changing consumer behaviour and expectations.

Further, effectively free and very powerful tools such as **Google Maps** are essential enablers, and are able to be utilised for the delivery of food into the home. Other supporting technology includes:

- Phone app technology that enables automated payment and ordering – essentially making the phone the shopping cart and the wallet.
- Technology enabling real time delivery updates.
- Ability to customise or personalise e.g. recognise preferences and repeat orders, tailoring suggestions and promotions.
- Voice activation, which is reaching a tipping point to become a regular interface with technology.



While technology is a vital enabler, one of the key features of the emerging delivery modes is that they enable effective, and often direct, **communication with the end consumer**. This communication involves functional aspects such as ordering and delivery details, as well as softer aspects such as communication of product attributes and provenance stories and customer information such as profiles and preferences. Successful communication should make the process of ordering, paying and delivery easy. Technology often enhances the communication process e.g. by offering real-time updates on delivery, or prompting consumer interest through online promotional offers. Some of the things communication enables, are profiled in Table 3 below.

**Table 3. Effective communication via emerging food delivery modes**

Enables the consumer to	Enables the retailer or food service provider to
<ul style="list-style-type: none"> <li>• Explore range and find availability.</li> <li>• Identify product attributes and discover provenance story.</li> <li>• Specify manual or automated payment, special requirements and delivery preferences.</li> <li>• Track the order.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop customer profile (CRM), including preferences.</li> <li>• Offer targeted promotions and complementary offers.</li> <li>• Have direct control over communication of brand and product attributes.</li> </ul>

<ul style="list-style-type: none"> <li>• Receive offers and information (e.g. recipes).</li> <li>• Keep shopping lists (preferences and regular orders).</li> <li>• Identify complementary or related items.</li> </ul>	<ul style="list-style-type: none"> <li>• Have direct communication with consumers, including avenues for feedback.</li> </ul>
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### Key Findings

⇒ **Emerging delivery modes are distinguished by direct deliveries to the consumer and lever off a technology enabling interface. They enable new ways to add and capture value such as channel skipping and enhancing products into a consumer-ready form.**

### 8.1.3 The size and impact of online marketplaces - Amazon and Alibaba

Globally, the presence of online market places, dominated by the likes of **Amazon** and Chinese-based **Alibaba**, which offer ‘virtual’ shopping centres, have changed the way consumers and retailers think and behave. For consumers, it has greatly expanded access and availability of products and built confidence in online purchasing in general, and in turn, is encouraging consumers to try buying grocery and fresh food online. For example, China’s Single’s Day, a 24-hour, annual shopping festival, saw 30% of families try the online grocery channel in 2013, rising to 49% in 2016.

For retailers, both existing and new, these virtual shopping centres have reduced the barriers to entry, as much of the infrastructure is already established. This is of particular relevance to small and medium sized businesses.

In terms of size, Amazon ships 3 million packages a day while Alibaba ships 12 million, according to international courier Parcel Hero. On Cyber Monday, America’s large e-commerce shopping day, Amazon processed 37 million orders. On Single’s Day, an annual shopping holiday created by Alibaba itself, Alibaba processed 278 million orders.

In 2016, **Amazon** held around 30% share of e-commerce in the US, and accounts for more than half of every new dollar spent. Annual revenue growth in 2016 was 27%, up from 20% in the previous year. The latest estimates place Amazon’s total revenue at almost \$44 billion. Amazon continues to put pressure on traditional retailers in the US, with hundreds of stores closing and concern among shareholders pushing major retail stocks down in the past year e.g. Rite Aid (-50%), JC Jenny (-40%), and Macy’s (-33%). Meanwhile Amazon stocks are up more than 30%, with the value doubling in 2 years and recently reaching \$1,000 per share. Amazon is believed to have more than 310 million active users accounts worldwide. In 2016, there were over 100,000 sellers with sales of more than \$100,000 selling on Amazon. In the second half of 2016 alone it added 23 new fulfillment centres in the US.

**Alibaba** is one of China’s largest and most high-profile company, with a market capitalisation of over one quarter of trillion dollars. The company was founded in 1999 and went public in 2014, with the initial public offering (IPO) on the New York Stock Exchange raising \$25 billion, more than any other in history. It operates three Chinese based consumer marketplaces and a Chinese based wholesale marketplace, as well as a global consumer marketplace (AliExpress) and Alibaba.com a global wholesale marketplace. In 2015, Alibaba gross merchandise volume (\$466 billion) was almost 6 times that of Ebay (\$82 billion). In 2016 Alibaba had more than 420 million active users, and about 80% share of e-commerce in China.

The **arrival of Amazon into Australia will likely have a sizeable impact** – with domestic retailers at risk of losing market share. The size and efficiency of Amazon, whose costs per square metre are

significantly lower than bricks and mortar retailers, combined with the slow take up of online by domestic retailers' places Amazon in a strong position. Amazon is expected to establish up to five distribution centres in Australia. Morgan Stanley have estimated Amazon may gain a \$12 billion share of the Australian total retail market within the next decade. Given its 370 million items available, the impact will be felt across all retailer channels, particularly department stores.

While online fresh food retailing has higher costs and more challenges associated with perishable items, and despite the relatively low take up of regular online fresh food purchases among Australian consumers, the expected arrival of Amazon Fresh grocery delivery and Amazon Go grocery stores will likely impact this market too.

It is significant that their expansion in UK has been in partnership with an existing supermarket operator (Morrisons). If such a partnership was arranged in Australia, it would rapidly enable their Amazon Fresh offer in this market, and bring more competitive pressure. It is also possible that Amazon offers to consolidate the home delivery of all the online food and meal options, and in doing so makes them more appealing to a wider audience.

### Key Findings

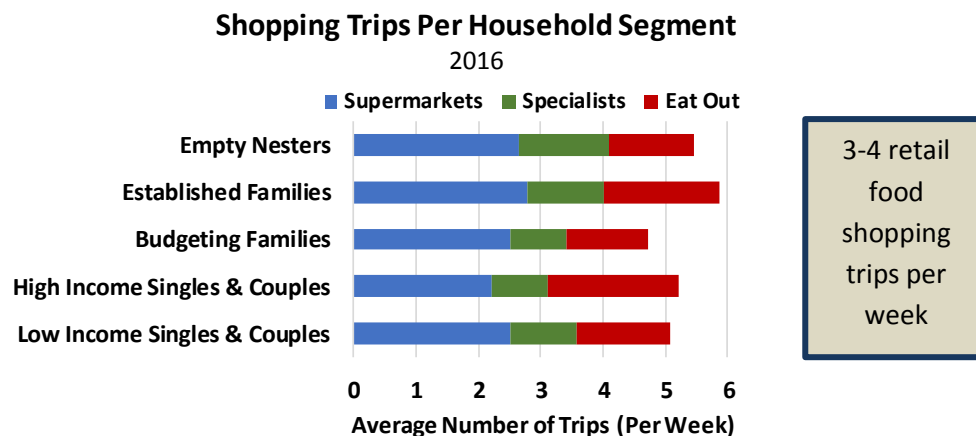
- ⇒ **Global online marketplaces such as Amazon offer 'virtual' shopping centres and have reduced barriers to entry providing a kick start to small businesses. The size and speed with which these marketplaces have grown points to the potential impact of this emerging delivery mode.**
- ⇒ **The arrival of Amazon has the potential to significantly impact in the Australian food market, supported by technology and infrastructure to support the speed and efficiency of home delivered food. While it may negatively impact some food market stakeholders, stakeholders who realign their business models or partner with Amazon have the potential to benefit.**

#### 8.1.4 Influences on wider market settings

More broadly, the emerging delivery food modes are being influenced by consumer demand for convenience, subdued consumer confidence, aspirations towards better health and reduced waste. Increasing retail competition, including a strong specialist offering and adaptive food service, are also impacting emerging delivery food modes.

**The demand for convenience is locked in**, with consumers seeking convenience in various forms across all meal occasions. The frequency of retail food shopping has now settled at 3-4 times per week, per household, as outlined in Fig. 2 below. This includes full and top-up shops at supermarkets and specialists, both in store and online. This demand has supported the expansion of retail ranges, incorporating smaller portions and more meal-ready products, suiting busier shoppers with shorter planning horizons, as well as the expansion in ordering and delivery options.



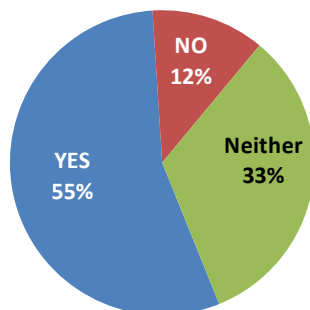
**Fig. 2: Number of shopping trips**

Source: Freshlogic Mealpulse™ Food Consumer Panel

Despite low interest rates, **consumer confidence remains subdued**. While budget consciousness is easing with fewer households reporting it in the last two years, the household budget remains a key focus for many, with 55% of households confirming that they are price sensitive (in the year to March 2017), as seen in Fig. 3 below. In addition, 58% of households stated that 'Higher prices have made me change some things I eat' (Year to December 2016).

**Fig. 3: Household food budget caution**

**"We have to watch our food budget carefully"**  
(Year to March 2017)



Source: Freshlogic Mealpulse™ food consumer panel

**Ongoing interest in food and health** is now a permanent setting. Consumers want to understand the story behind their food, including where it's from, what's in it, and how it has been farmed and processed. Food is increasingly being viewed as contributing to long term health and wellbeing. Health and wellness is converging with sustainability and waste minimisation, as these also contribute to 'feeling' good about food.

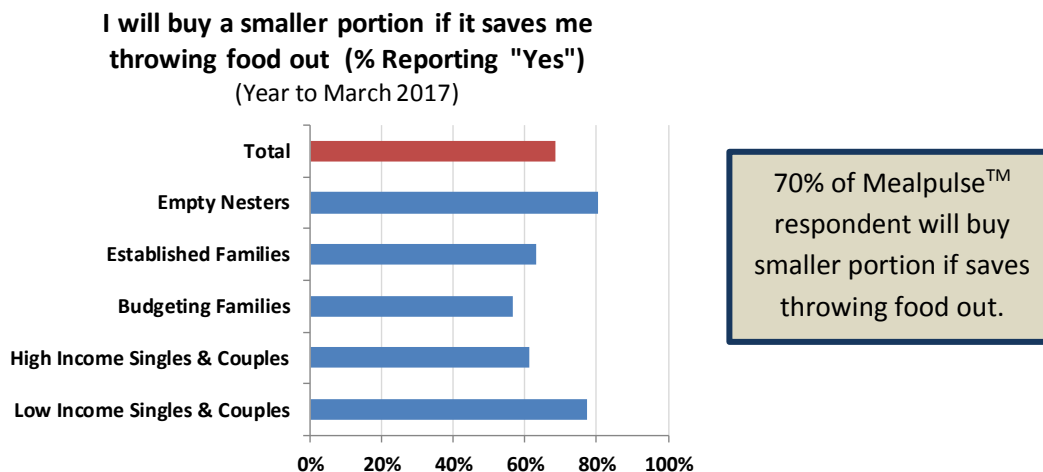


**Food waste is increasingly viewed as irresponsible** by consumers, and it is influencing how they shop, see Fig. 4 below. Consumers are increasingly willing to overlook superficial blemishes, especially those that are sold at a discounted price. Demand for smaller pack sizes has compounded consumer sensitivity to packaging waste.



**Fig. 4: Consumer sensitivity to waste**

Source: Woolworths



Source: Freshlogic Mealpulse™ food consumer panel

**Increasing retail competition** has intensified further as a result of the successful entry and expansion of the Aldi and Costco operation, with a combined network of 484 retail stores, capturing around 10% retail food market share. This has created new pressure on the once dominant supermarket offerings of Woolworths, Coles and the independent supermarkets such as IGA, serviced by Metcash.



The establishment of these new entrants has changed the Australian retail food market distribution channel dynamics. The future prospects of the once dominant conventional supermarkets are quite different, with the growth path of the last 50 years no longer assured.



**Independent specialists** have a combined market share of more than 20% in the Australian retail market. Specialists are viewed by consumers as the provider of best quality and wider range, as well as being competitive on value, and as a result often generate stronger loyalty. Fig. 5 below indicates the level of use, with up to 30% of supermarket shoppers also shopping at a specialist. These competent retailers source stock from central markets and will quickly expose any weaknesses in the supermarket retail offers. There are more opportunities for customisation in specialists, as processing typically occurs on-site.

**Fig. 5: Use of specialist retailers**

Source: Freshlogic Mealpulse™ food consumer panel

The **foodservice sector** has proved to be adaptive, and has adjusted to cater for a more value sensitive consumer. Casual sit-down dining as well as quality home delivered hot restaurant meals, has evolved to build loyalty, with stronger patronage from regular customers seeking an acceptable value alternative for the time-pressured weekday meal. The enterprises are informed and regular buyers of their fresh ingredients, and will respond quickly if the product quality is not at the level they require.



### Key Findings

- ⇒ **Emerging delivery modes are being driven by consumer demand for convenience, and enhanced by an interest in health and food provenance, a desire for reduced waste, and demand for quality casual dining including hot restaurant meals delivered to the home.**

### 8.1.5 Size and shape of emerging food delivery modes – domestic and global

The size and shape of the emerging food delivery modes point to their significance and relevance for the red meat industry in Australia. This is evidenced in the section below which profiles key trends and market facts in Australia and globally. Unless otherwise stated, all figures refer to the Australian market.

#### 8.1.5.1 The grocery and specialist market

**Emerging delivery modes**, such as home delivered groceries and food from specialists such as butchers, are poised to capture share as more households move to embrace this blend of convenience.

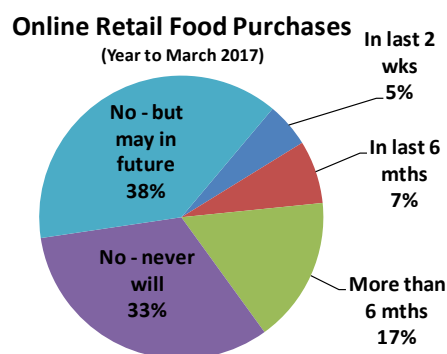
The total grocery market in Australia is worth around \$95 billion, with market leaders Coles and Woolworths holding a 75% share. The online grocery market (excluding liquor) is worth an estimated 2%, or \$1.9 billion.

Globally, the share of all retail sales (food and non-food) undertaken online ranges from 15-20% in leading Asian markets such as China and South Korea, 15% in the UK and 12% in the US.

In Australia, the NAB estimates the total online retail market to be worth \$22.23 billion in the 12 months to March 2017, or 7.3% of the traditional bricks and mortar retail (of \$305 billion). While the rate of growth in online sales is slowing, up 9% year-on-year for March 2017 compared to rates as high as 40% in March 2011, growth remains significant. Year-on-year online grocery (incl. liquor) sales increased 7.9% in March 2017, and now represents 16.7% of the total online sales (\$3.71 billion).

Mealpulse™, Freshlogic's food consumer panel, indicates that **5% of Australian households make regular purchases of retail food** (e.g. supermarket and specialists) via the internet as seen in Fig. 6 below. This percentage has held steady for the past few years, however more people are trying or are willing to try it, with fewer households over time stating they 'never will'.

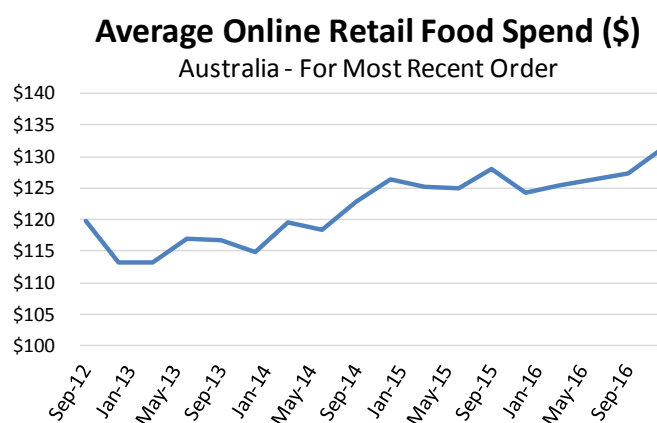
**Fig. 6: Proportion of Australian households purchasing retail food online**



Source: Freshlogic Mealpulse™ food consumer panel

Freshlogic's Mealpulse™ data indicates that in Australia **online grocery purchases are also important in terms of value**, with the average online retail food spend (~\$130) far exceeding the average instore spend (~\$45). In addition, average food spend continues to increase, as outlined in the Fig. 7 below.

**Fig. 7: Online retail food spend**



Source: Freshlogic Mealpulse™ Consumer Food Panel

While the two major supermarkets in Australia have online offers in place, conversion of sales currently dilutes the scale for their retail stores. In addition, with Woolworths and Wesfarmers generating an estimated 2-3% of total sales online, they currently remain behind global levels, with the average proportion of sales generated online for global supermarkets around 5% for the likes of

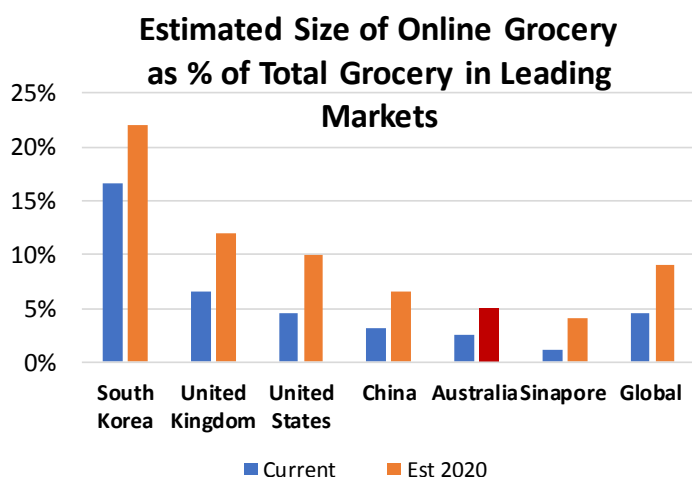
Tesco, Ahold Delhaize and Morrisons. Despite the supermarkets' advantage of existing supply chains, the online sales are expected to be dominated by those who provide more convenience with their offer, including timely delivery, and are able to harness technological advantages.

A report by Kantar Worldwide, which captures trends in key global markets across three continents, indicates **online grocery shopping is steadily growing globally**, although it varies by region.

Total worldwide sales of FMCGs grew 1.6% in year ending June 2016, but online sales of FMCG goods grew 15%, and now account for 4.4% of the market or US\$48 billion.

Globally, South Korea leads the way, with online sales accounting for almost 16.6% of the FMCG market, as seen in Fig. 8 below. Strong online sales are supported by fast internet connection and 85-89% smartphone penetration, with almost 100% of consumers aged 10-40 undertaking some shopping online. In the next decade, the share of online FMCG sales in South Korea is expected to increase to 25%.

**Fig. 8: Online grocery market size globally**



*Source: Public releases and Freshlogic growth estimates*

The e-commerce share of the UK grocery market is the third-largest globally and growing, though at a slower pace than in recent years. Growth, which had been 20% annually, has more recently declined to less than 10%. However, only 13% of U.K. households currently use mobile devices for online grocery shopping.

The US online grocery market is estimated around 4-5% of the total grocery category, while the UK the online grocery market is estimated to hold a 6-7% share of total grocery sales.

While total sales are currently moderate, growth continues. An estimated one quarter of American households currently buy *some* groceries online, up from 19% in 2014. This has been supported by tech-savvy Millennials, who are more willing to buy groceries online than other consumer groups, as well as the convenience of both delivery and click and collect services. Estimates suggest online shopping in the US for food-at-home items could grow five-fold over the next 10 years. In the next few years, growth in online grocery sales in leading global markets are expected to grow at annual rates of up to 20-40%.

Global annual growth rates in online grocery sales are significant. All indicators are that online grocery sales will increase in Australia too. If Australian online share of groceries doubled from its current level of 2-3% to 5% by 2020, similar to levels currently experienced in the US, this would

equate to online grocery spend worth \$4.5 billion. Given that discounters ALDI and Costco achieved a grocery market share of 9-10% in 15 years generating significant implications for the broader market, it is reasonable to expect very real implications from share growth derived from emerging delivery modes given this growth is expected to occur even more swiftly.

### Key Findings

- ⇒ **In comparison to the way grocery discounters Aldi and Costco impacted the retail market, after gaining 9-10% market share over a 15-year period, growth in the online share of grocery spend could well generate a stronger impact in a much shorter time frame.**

#### 8.1.5.2 Meal plans and meal kits

A fuller level of convenience is being provided by the meal plan and meal kit providers, including the likes of Lite n' Easy, Hello Fresh, and Marley Spoon, which have established credible offers in the home delivery meals or meal kits. These providers are sourcing and managing the home delivery of complex fresh food ranges that include packaged salads and fresh proteins. It is significant that these operations have resolved the home delivery of this sensitive range of fresh foods.

In Australia, prepared meals and the meal kit delivery market accounts for nearly half of the total online grocery market sales, and is supported by consumer demand for fresh, convenient, quality meals.



**MARLEY SPOON**  
*Example of providers*

Hello Fresh, the first company to launch the concept in Australia in 2012, together with Marley Spoon, are now the two largest **meal kit** providers in Australia. Globally, these providers are dominant. US-based HelloFresh, which was founded in 2011, has global sales of more than \$618 million, serves more than nine million meals a month. Berlin-based Marley Spoon was founded in 2014 by former Delivery Hero chief executive Fabian Siegel and launched in Australia in 2015.

The market is competitive, with new providers keen to enter the online grocery market in the hope of tapping into annual growth of up to 20%. While many hope to establish positions before Amazon launches key food offers such as Amazon Fresh, in the US Marley Spoon *is utilising* Amazon and has partnered with Martha Stewart to sell co-branded meal kits on Amazon Fresh.

Globally, the sale of meal kits is estimated to exceed \$1 billion (2014), with the US accounting for 40% of this market. In the US, in 2016, there were around 170 online meal kit delivery providers. Many providers target mainstream consumers, with demand driven by older millennials often in higher income brackets, however there is an increasing variety of specialised diets and menu preferences being incorporated, along with new ingredients and flavours, and new cooking techniques.

### Key Findings

- ⇒ **Providers of meal plans and meal kits have overcome many of the issues with delivering sensitive fresh foods into the home, and now have a varied and extensive offering. This segment is attracting new entrants and enjoying growth.**

### 8.1.5.3 The size and nature of home delivered restaurant food

Ready to eat home delivered restaurant meals have become more available after a range of ordering apps have been created and rapidly expanded. These apps align the **latent potential of the food service kitchens with technology savvy** consumers to home delivery ready to eat meals. They have captured substantial market share, some of which has come from restaurant sales but a good proportion of which is new business. These systems are all owned by global enterprises, and the value of acquisitions in the Australian market generating close to AUD \$1 billion in the last 3 years. Clearly some investors see opportunities, and this analysis concludes that some consumer segments will embrace these offers, and that the sum impact will **move share of stomach from retail to food service**.



Example of providers – home delivered restaurant meals

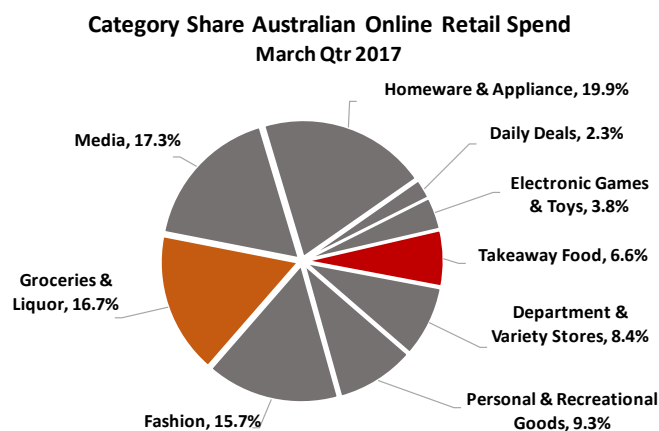
Supported by savvy delivery partners and a technology interface, the market for home delivered restaurant meals is booming. The NAB estimates annual growth in home delivered restaurant food was 21% year-on-year in March 2017 and now represent 6.6% of total online sales, as seen in Fig. 9 and Fig. 10 below.

Fig. 9: Online retail spend in Australia



Source: NAB Online Retail Sales Index

Fig. 10: Category share of online retail spend in Australia



Source: NAB Online Retail Sales Index

In the US, in 2015, around \$210 billion worth food is ordered for delivery or takeaway each year.



With recent developments in Australia, such as fast food giants McDonalds signing up to delivery via UberEats, and hospitality venues (e.g. brewery) with no onsite restaurant encouraging customers to order food in, the market is expected to continue evolving and growing.

Ultimately, the growth in ordering apps, improvements in delivery models, and take up by tech savvy customers have seen food service start to gain share of total food spend off retail.

### Key Findings

- ⇒ **Ordering apps, improved delivery and take up by tech savvy customers is resulting in food service putting increasing pressure on retail, and ultimately gaining share of stomach.**

#### 8.1.5.4 Self-serve and vending

Food vending machines have developed rapidly in recent times, supported by improved technology and design, including refrigeration engineering, and can offer effective distribution options. In addition, food vending aligns with changes in food buying and consumption patterns, including demand for convenience and smaller, more frequent shopping trips.

In general, Australia lags behind other developed markets in the use of vending of machines for food and especially fresh food. The increased use of self-serve retail checkouts is viewed as a positive indicator of scope to increase sales through the similarly self-serve mode of vending machines.



*Example of vending offer, Europe*

While Australia is not currently a 'vending' nation, vending is becoming more popular, with new generations of vending machines and a wider product range becoming increasingly common in Australia. These machines are overcoming some of the negative connotations associated with earlier machines, which is reflected in them referred to as a 'self-service cafes' or 'unmanned outlet'.

There is a growing acceptance that the food quality that vending machines can offer. This is supported by an expanding range and take up by consumers in other leading global markets – including fresh meat sold in close proximity to producers or butchers which effectively allows them to lever off existing branding to sell products outside of normal trading hours.

However, fresh food vending offer in Australia is still quite limited and does face some challenges in terms of consumer perception, shelf-life and the frequency of servicing required. The success of vending also relies on access to high pedestrian traffic, with many located in workplaces, education setting, transport hubs and recreation facilities.

- ⇒ **The growth in vending is leveraging off familiarity with 'self-serve' checkouts across retail – which is now a mainstream shopping experience. It is also supported by enhanced vending technology and the associated improvement in quality and range of food on offer. Vending machines have evolved into solutions to extend trading hours, and to offer 'self-serve cafes' in high traffic locations including workplaces, often leveraging off an existing supply chain and a solution to restock.**



## 8.2 Appendix 2 – Profile of individual emerging food delivery modes

### 8.2.1 Emerging food delivery modes in detail

This section details the emerging food delivery modes of relevance to red meat stakeholders. It profiles each of the delivery modes in detail, including key points of differentiation, the flow of stock along the supply chain, the flow of communication to and from the consumer, where new value is being captured and where pressure points exist. This is supplemented by a profile of domestic and international examples.

#### 8.2.1.1 Categories of emerging food delivery modes

The emerging delivery modes have been considered in the following framework, which is based on four main categories as seen in Table 4 below.

**Table 4. Emerging food delivery modes by category**

Category	Emerging food delivery mode
<b>Grocery, specialist &amp; other</b>	1. Existing bricks and mortar supermarket retail offer, ordered online, delivered to the home, facilitated by the retailer
	2. Existing bricks and mortar supermarket retail offer, ordered online, delivered to the Home, facilitated via personal shopper
	3. Fresh food and grocery offer, ordered online, delivered to the home, using central warehouse and distribution
	4. Specialist retail offer, ordered online, delivered to the Home, facilitated by the specialist
	5. Specialist retailer offer sold via collective online market, with individual home delivery
	6. Specialist retail offer sold via collective online market, with coordinated home delivery
	7. Bulk offer delivered to the home
	8. Exporter direct sales to international homes
<b>Meal plans &amp; kits</b>	9. Meal plans delivered to the home
	10. Meal kits delivered to the home
<b>Home delivered restaurant meals</b>	11. Local restaurant providing hot ready meals direct to household
	12. Hot restaurant meals delivered to the home via third party
<b>Self-serve</b>	13. Self-serve or vending

#### 8.2.1.2 Example profile of individual emerging food delivery modes

Fig. 11 and Fig. 12 below indicate how each profile is set out. The first page profiles the supply chain and key features, and indicates where new value is captured and pressure points exist. The second page provides domestic and international examples, and sums up the way the mode operates and its potential. Appendix 2 Full Detail profiles all 13 emerging delivery modes in detail.

Fig. 11: Example of emerging food delivery mode profile – Page 1 including key features, new value and pressure points

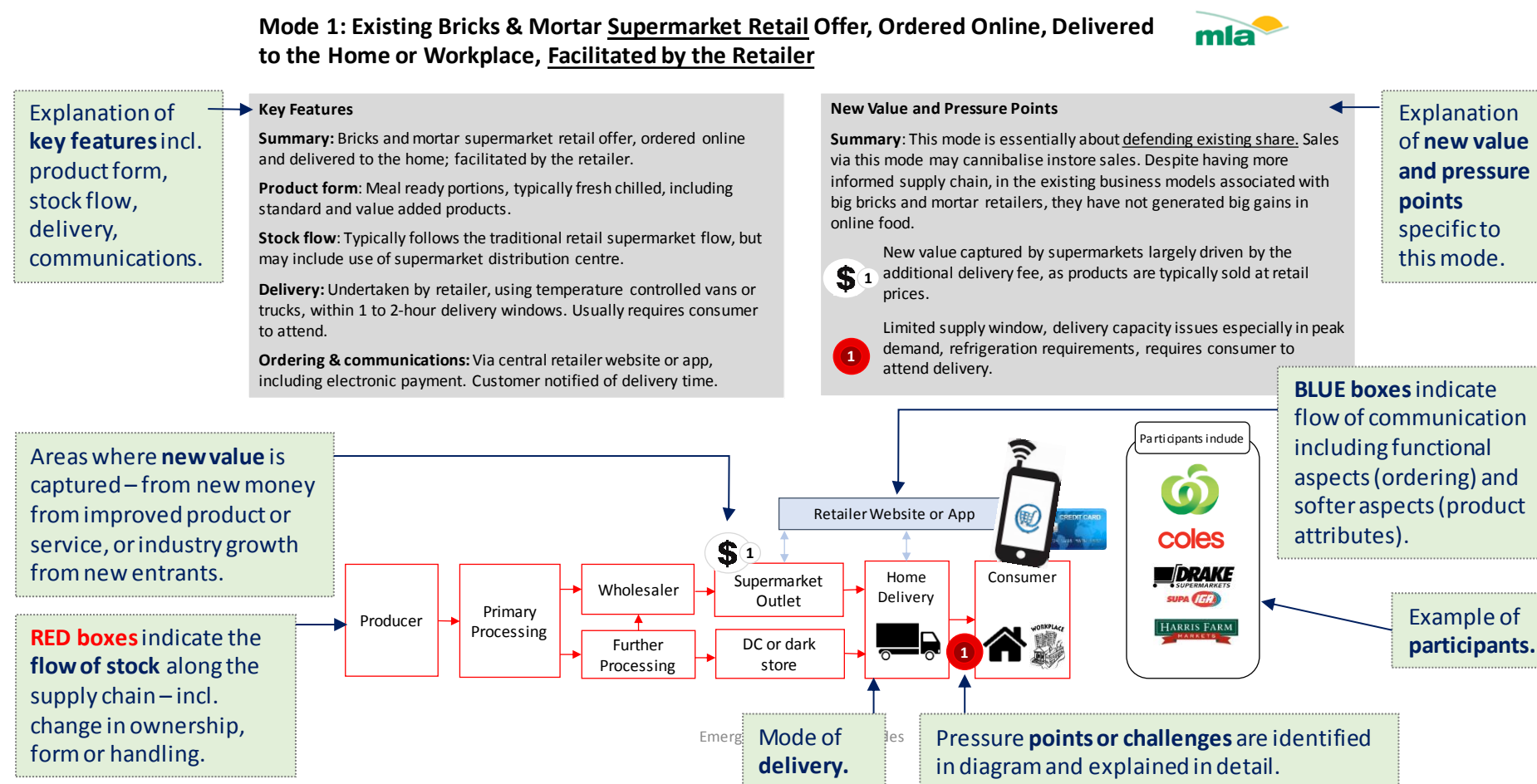


Fig. 12: Example of emerging food delivery mode profile – Page 2 including domestic and international examples

## Mode 1: Examples

