

# Trends and developments

## Introduction

This chapter sets out to highlight a range of current trends affecting the food and beverage manager. It is naturally selective and provides only an initial insight into some of the emerging issues facing the industry. The importance of these issues to different industry sectors and in different countries will vary, but the chapter will help you to understand the basics and provide you with a foundation and further details of where to pursue particular issues in more depth.



## Chapter objectives

After working through this chapter you should be able to:

- Understand a range of trends affecting the food and beverage manager.
- Identify the possible influence of the media on consumer behaviour.
- Discuss changes in consumer choices in the UK and USA.
- Understand current environmental issues.
- Be aware of recent trends in financing a food and beverage operation.
- Be aware of ethical issues in the industry.
- Understand the definitions of high tech food.

## CONSUMER TRENDS

One of the biggest changes in the past decade in the food and beverage area has been the recognition of the importance of consumers and the choices they make. The industry has become more market led and operators who do not take account of their customers' needs and wants have suffered. This change has been partly reflected in the growth of food-related issues reported in the media and the wide array of television programmes with food, cooking, chefs and restaurants as their focus. These programmes range from Jamie Oliver's *School Dinners* to Gordon Ramsay's *the F Word* or Raymond Blanc's *The Restaurant*, alongside long running series of *Hell's Kitchen*, *Ready Steady Cook* or the competition of *Saturday Kitchen* on BBC v. *Saturday Cooks* on ITV. Searching for programmes related to food on UK TV channels at the time of writing, resulted in 40 separate programmes in one week alone and that excludes the UK TV Food Channel! To this can be added increasing numbers of restaurant reviews in all the major newspapers and the emergence of specialist magazines such as *Good Food*, *Delicious* or *Olive*. Media interest and involvement in food and cooking, in the UK at least, has never been higher.

According to a recent Mintel Report (2007a) on the effect of the media on eating out, half of the consumers they surveyed did not believe that the media had affected their eating out decisions but they suggest that the effect of the media is perhaps in some ways so subtle that people do not realize, or do not wish to admit, that they have been influenced. The report suggests that as the amount of media coverage has increased, consumers have become more interested in particular foods, cuisines and ingredients, showing more sophistication in their choices when eating out. Generally, customers have become more knowledgeable about nutrition and healthy eating, especially following the UK government's healthy eating campaign, and how different types of foods should be prepared and cooked, and this is having an effect on where people choose to eat out and which dishes they will select. This in turn

has led to more restaurants publishing nutritional information on their menus or websites and introducing more salads, vegetable side dishes and lower fat options. Many fast-food operators have found that customers are increasingly critical of their product offer and have again tried to respond with healthier options. For example, Burger King offer a Garden Salad without dressing that has less than 35 calories and a range of low fat dressings in Honey and Mustard, French, or Tomato and Basil flavours with less than 3% fat. Another interesting finding from this report is that almost one-third of their respondents would be prepared to pay a premium price for 'high quality' food when eating out which perhaps suggests an opportunity for restaurant operators to make profit out of raising their game.

### Activity

Visit a number of different websites for restaurants appealing to different sectors of the market. Which of these companies have detailed nutritional information on their websites? Why might there be a difference between operators?

The Mintel Organization also prepare very detailed reports on the eating out market in general, which provide very useful information for food and beverage operators on who is eating what, where and how often. The latest report (Mintel, 2007b) has highlighted the key trends of the last few years. These include:

- Continued growth in the eating out market in the UK with an overall growth in spending of around 25% between 2002 and 2006.
- This growth in the market has been fuelled particularly by the substitution of eating out for 'normal' eating at home – what is called the substitute domestic market.
- The growth has not all been due to replacing cooking at home but has been further encouraged by media coverage and the celebrity chefs, experience of new cuisines while on holiday abroad and by the increasing variety of possible eating out venues.
- From an estimated spend on eating out in 2006 of some £29 billion, the sector is expected to grow to nearly £37 billion in 2012.
- There does appear to be a clear split in the market between operations offering excellent value and being able to compete with home cooking on price and those up-market operations, including the gastropubs, where people are prepared to pay, quite high prices for the more luxurious and indulgent choices. This has left the middle of the market, the casual dining operations, as a particularly dynamic and innovative but especially competitive sector.
- Another dichotomy in the market is between chain operations and individual outlets. The modern consumer has a new

found confidence to choose individual operations without the need for the reassurance and reliability of the brand but at the same time chain operations continue to grow and flourish and are seen as a good target for investment.

- A final dichotomy highlighted by the report is between the innovative nature of the eating out market and operations developing new cuisines, new niche products and processes as against increasing regulation of staffing and food service generally that may make it more difficult for smaller operations to comply and compete and so reducing variety and choice.

A similar report in the United States (Sloan, 2007) has highlighted 10 key food trends. These include:

1. Contrary to trends in the UK, economic pressures are encouraging more Americans to eat and cook more dinners at home, with three quarters of the respondents eating dinner at home at least five days a week – although many of these will be restaurant branded meals from a food store or takeaways. At the same time, however, eating out for breakfast and lunch is continuing to grow.
2. There is a growing ‘foodie’ culture and many customers are ‘trading up’ to more exotic and gourmet meals, both in restaurants and as indulgent treats to cook at home.
3. There has been a growth in pre-prepared convenient products, such as peeled and chopped, and even cooked, vegetables and upscale frozen dinners. Portion sizes are however reducing, with TGI Fridays Right Portion Right Price promotion (30% smaller portions for between \$6.99 and \$8.99) being reflected in smaller cook at home portions.
4. More foods with greater sensual appeal in both flavour, aroma and texture.
5. Increasing numbers of children but increasing awareness of child obesity and so interest in healthier options.
6. For grown ups, there is a trend towards foods ‘without’ – fat free, dairy free, sugar free, caffeine free and so on.
7. There has been a growing interest in locally sourced, seasonal produce from specialist or artisan producers, with a strong association with a reduction in food miles – the distance between the producer and the plate.
8. This is linked to an interest in more healthy eating, either to reduce the risk of developing a health problem or to help with an existing issue.
9. A new interest in unusual beverages, ranging from high energy drinks to ready-to-drink tea and coffee, and bottled mineral waters and even Health Colas.
10. Snacking and sharing extends from new snack offers in the mid afternoon and late at night growing in popularity in fast-food operations, to ranges of upscale bite size appetizers for sharing and even the appearance of bite size dessert platters.

**Activity**

Compare and contrast the trends described above for the UK and the USA. Where are the main differences? What possible reasons are there for this?

**ENVIRONMENTAL ISSUES**

There are a number of environmental issues of which food and beverage operations must be aware. Three of those issues strongly related to food and beverage operations are explored. The issues of waste management, energy and water consumption, and the effects to the environment by procuring products from far away parts of the world.

**Waste management**

One of the most important environmental issues for food and beverage operations is that of waste management. The importance of recycling and reusing products has become a focus of many local government agencies. The reality of inefficient waste management is becoming more apparent as the shortage of land where waste can be buried is increasing day by day. Furthermore the effects on human health due to pollution, the effects of excess packaging which can be easily witnessed in any supermarket and the fact that waste has to be transported in order to be buried often to large distances adding to carbon emissions and further pollution.

So what can operators do to ensure they minimize waste? Depending on the size of the operation the operator could do some or all of the following:

- Invest in waste minimizing technology such as grinders and incinerators not unlike the ones that are currently utilized in some cruise ships.
- Reuse items such as printer paper, envelopes, packaging.
- Reduce usage of things like paper, for example do not print what does not need printing.
- Compost as much of the waste as possible.
- Recycling glass, paper, aluminium and plastic can reduce an operations waste by up to 35%.
- Invest in a vacuum drainage system (e.g. see [www.evds.org.uk](http://www.evds.org.uk)).
- Ensure you operate a waste minimization programme and that you evaluate the amounts of waste your business generate regularly.
- Educate your staff, suppliers and customers so that they also minimize waste whilst on your premises. The Acorn House restaurant, for example, offers various portion sizes in an attempt to reduce customer wastage and at the same time offer better value for money.

These are only a few of the things that a responsible and effective food and beverage manager should consider about their business. It is imperative to be informed and keep up with advancements in the area as the more efficient in waste management an operation is the more profitable it will be.

### Activity

In groups of 2 to 3, research and identify the waste minimization and recycling programmes that local governments operate in your area. Visit at least two of your local restaurants and ask a few of the staff if they are aware of those programmes and what policies they have in place. Share your findings with the rest of your class.

## Energy and water consumption

Another major area of concern is that of energy and water consumption. It is of course highly connected to waste management as an effective waste management programme would also reduce excessive use of energy or water. More governments will soon be imposing a carbon tax or levy which could easily be applied to all companies including hotels and restaurants. In the UK, such a tax was introduced in 2001 and saw the increase of energy bills for hospitality operations to up to 15%. Whilst the EU had introduced the Emissions Trading Scheme (ETS) that enables companies exceeding individual CO<sub>2</sub> emissions targets to buy allowances from 'greener' ones in order to reach the EU targets under the Kyoto Protocol. Energy and water will get more expensive as the years go by and although for energy there may be alternative sources, water could become a rare commodity in the not so distant future. Ensuring that an operations use of energy and water is efficient will reduce costs effectively increasing profits.

Ways of reducing energy and water consumption can be achieved by:

- Using energy efficient equipment and light bulbs.
- Recycling of grey water.
- Utilizing alternative energy sources, such as solar power.
- Adjusting taps and toilet water tanks.
- Minimizing water leakages.
- Training staff to switch off lights when not needed and use water responsibly.

There are a number of companies that are taking steps to minimize their energy and water consumption and its effects to the environment. For example the Orphalese a new cruise liner, features alternative power sources, a wastewater treatment plant, washing machines that utilize sound waves and use 10 gallons of water as opposed to 60 in conventional machines ([www.theorphalese.com](http://www.theorphalese.com)). Another example in the UK McDonalds is planning

to have its 155 strong delivery fleet running on a mixture of in-store cooking oil and rapeseed by the end of 2007 (Druce, 2007).

### Activity

If you are a restaurant manager how would you ensure you conserved energy and reduced water consumption in your operation? Do you think the industry is doing enough in this area?

## Thinking globally, buying locally

In July 2005, the Department for Environment, Food and Rural Affairs (DEFRA) in the UK released a report that showed that the amount of food transported annually was increased by 23% since 1978, and that the average distance for each trip also up by 50%. The report also showed transport by air was on the increase and the full social, environmental and economic cost effects was estimated at a total of over £9 billion each year (Mae Wan Ho and Gala, 2005). The report identifies the major changes that have affected the increase as:

- The globalization of the food industry with increased sourcing of food within the UK and abroad.
- The consolidation of the food supply base into fewer, larger suppliers, partly to meet demand for bulk year-round supplies of uniform produce.
- Major changes in delivery patterns with most goods now routed through supermarket regional distribution centres using larger heavy goods vehicles.
- Centralized and concentrated sales in supermarkets where a weekly shop by car has replaced frequent pedestrian shop visits (Mae Wan Ho and Gala, 2005).

Although the findings of this report do not concentrate on the hospitality industry alone it is evident that procuring goods that have travelled a number of miles on a plane from another country cannot be sustained. The industry must take the lead and illustrate that procuring goods locally where possible is a way of thinking about the global environment and reducing negative impacts. There are a number of restaurants that have taken such steps to ensure they minimize their food miles. Some examples include The Glasshouse Restaurant in Lyndhurst, UK. The Acorn House Restaurant in London UK, The North Pond Restaurant in Chicago, USA.

The debate of course may be that if we support local farmers what about developing countries such as Kenya that wholly rely on developed countries to purchase their produce. In an article by Corporate Watch in 2004 the author argues the fact that small farmers in developing countries are seen to be marginalized often receiving no more of 12–14% of the export as the supermarkets

have total control in setting prices making it unprofitable for these farmers to remain in business (Food Miles, 2004).

### Activity

This is a debating activity. It can be done in pairs of two opposing individuals or in two opposing groups, one side defends statement A, and the other statement B.

Statement A: Buying locally reduces the carbon footprint, supports local producers and helps the environment.

Statement B: Buying locally condemns developing countries farmers to poverty and starvation.

## FINANCING THE OPERATION

Restaurant operators are always looking at innovative ways to finance their operations with Real Estate Investment Trusts (REIT) being the latest exciting financing option in the industry. Asset financing has also been a widely used option in the last decade amongst small- and medium-size operators. Finally the hotel industry is going down the road of selling rooms to their customers, so arguing the emergence of a similar scheme within food and beverage operations in the future would make sense.

### The emergence of REIT

REIT have been around for many years but in the UK only recently have hotels and restaurants been allowed to join into such schemes. REIT allows individuals to invest in property listed on the stock exchange. The added bonus is that investing in REIT you effectively invest on property without having to pay corporation tax. Properties within the portfolio of the REIT must generate their own income and a person can own no more than 10% of each trust.

Vector Hospitality was meant to be the first hospitality firm in the UK to float on the market, however the company pulled out due to lack of investor confidence (Times Online, 2007). The scheme has found success in the USA where hospitality firms were allowed to join in, in 2001 (Hotel and Motel Management, 2007). Today a number of firms exist such as Ashford Hospitality Trust Inc., Diamond Rock Hospitality Company, Highland Hospitality Corporation, Hospitality Properties Trust, Strategic Hotels & Resorts Inc., Supertel Hospitality Inc., to name a few. The success of REIT's in the USA suggests that soon there will be a similar trend soon in the UK and possibly the rest of Europe.

### Asset financing

For restaurant companies that are in the growth stage and in need to release capital back into their business, asset financing is one of the solutions that they would often look into. In areas

such as London, where property can be very expensive, selling one building under this scheme may be enough to finance another property in another city. More specifically an owner would sell a building (but would retain operational control of the company) and lease it back using the capital released to further expand the companies. Known as an Operating Lease this type of finance sees the asset transferred to the lessor whilst he rents the asset to the lessee over a period which may be from one to five years or in some cases more. As the lease expires the asset returns to the lessor who may sell or rent the property to a new person or the lease can be extended. A successful restaurant owner who may wish to open his second or even third property will often find this method of financing an attractive option, although it carries the commitment of a long-term contract.

### Buy a restaurant table

A recent trend in hospitality is that of buying hotel rooms that the hotel operator rents out to guests and returns part of the revenue to the investor. The Chicago Mandarin Hotel is one of the latest hotel properties to announce the use of this type of investment (Manson, 2007). Typically investors are allowed certain use of the hotel facilities and the use of their room for a number of days per year. In London, for example, hotel rooms typically cost from £150,000 to £500,000 to build so the scheme is attractive to investors who are regular travellers to the city and wish to invest a smaller amount of money than buying a small flat which may cost from £300,000 upwards. In the same context it may be possible that in the future, the restaurant industry will witness the 'Buy your Own Table' option where investors buy a table, get certain privileges when booking in the restaurant and enjoy a share of some of the revenue for the particular table.

## ETHICAL ISSUES

Ethics in food and beverage management is an important area and one that could easily be the focus of another book. Here, the reader is directed towards two issues that are current and will probably continue to be so in the next few years. Ethical food production and a debate on ethics in tipping practises.

### Ethics and food produce

Restaurants may offer in their menu items that are controversial due to the way they are produced and the effect that these techniques have on the living animals. For example, foie gras is a French delicacy where geese are forced fed corn mash through a tube that is placed in the animal's oesophagus. The result is an enlarged liver with a number of possible negative effects. A number of countries such as Denmark, Italy and Germany have banned force feeding whilst the EU is currently considering a ban on foie gras. Another example is that of white crated

veal were calves are confined in veal crates no bigger than 2 ft wide, and the animals cannot turn or move at all or see day light in order to produce veal of a pale coloured flesh, which is effectively the product of induced borderline anaemia. Other examples can include the use of types of fish that are extremely depleted or fish that is caught in a way that harms other animals such as dolphins. The list of examples of menu items that are used in the industry can be a long one and although information is abundant about those types of produce we find that still operators continue to feature such items in their menus. The debate as to whose responsibility it is as to whether such food items should be consumed continues. Is it the restaurant manager who should claim responsibility and should not use such products or is it the consumer who should refrain from buying such items? Food and beverage management is about managing the operation effectively and ensuring not only the short-term viability of the operation but also its long-term one. Logic would dictate that utilizing sustainable methods of food production would protect the long-term efficiency of the business. So it makes sense from a business point of view to be an ethical food and beverage manager. But even if the benefits are not that great it is the responsibility of both the consumer and the food and beverage operator to ensure they have the knowledge of where their food or beverage comes from and how it was produced. Food and beverage managers do not just sell food and beverages but an experience, so educating their customers can also become part of that experience enabling such operators to have an innovative advantage such as in the case study of the Acorn House Restaurant in Chapter 4.

## Ethics in tipping

For many years numerous writers have proposed theories about the differences between a service and a product. The nature of the tangible and intangibles in service, the perishability of services and the need for the recipient of the service to be present at the time of delivery are just a few. We also know that many products have an element of service and many services have a product attached so how in these situations do we determine whether we are primarily receiving a service or simply acquiring a product? One answer to this, and the basis of a clear ethical debate, is whether or not we are required to give a gratuity.

This view about whether we are primarily buying services or products is more complex than it looks at first glance. For example, if we go to the supermarket and buy our groceries the cashier will put all the items through the scanner and offer to pack them for you or get an assistant to pack them, you pay the bill and leave, there is no notion of giving either the cashier or the packer a gratuity. If however you buy these same groceries 'online' do you give the delivery driver a gratuity?

Consider then the situation in a restaurant. It is perfectly legal to charge for service, provided it is clearly stated on the menu

and customers are aware that a percentage will be added to the cost of their meal as a service charge. However what the customer cannot do in this circumstance is not avail themselves of the service. In other words you cannot serve yourself and avoid this additional charge.

The question therefore hinges on whether you believe that it is ethical to be required to pay a gratuity for receiving a service that is an integral part of the product on offer (i.e. the meal). In addition many will argue that without such a gratuity system service would not be as good or as efficient, that in fact the promise of a gratuity somehow motivates staff to do their job properly. Consider going into a self-service cafeteria, you may look at the menu to check the choice available and glance at the prices to see if they are acceptable. The prices will be fully inclusive of all costs including staffing and an element of profit. The price charged would be generally lower than that charged in a serviced restaurant, partly because of the product range but also staff costs will be lower and you are not normally expected to tip the counter staff, although occasionally you do see a dish with small change by the cash desk that is an invitation to tip. So, if a serviced restaurant includes higher staffing costs amongst other things in its pricing then why is it necessary to add an additional charge for service because without the service you would not be able to avail yourself of the product. Consider also the wording that appears on some menus concerning gratuities listed in Table 12.1 with some suggested euphemisms for how they are worded.

One area of hospitality where the gratuity culture is essential to the income of service staff is the cruise ship industry. Most shipping companies whether merchant or passenger sail under what are termed 'Flags of Convenience' (FOC) which means they fly a flag of a country other than the country of ownership. Whilst most of the problems associated with this practice are concerned with merchant vessels, the International Transport Workers Federation (ITWF) also cite a number of related difficulties for

Menu wording	Possible euphemism
Service is not included	We expect you to add at least 10% to your bill as a gratuity
Service is at the customers discretion	Don't be too discreet leave at least 10%
A service charge of 12.5% will be added to parties of eight or more	We want to be sure that when everyone in your party pays separately we still get a decent tip
For your convenience a 15% service charge will be added to your bill	This allows us to attract you with lower menu prices without it affecting profitability

**Table 12.1**

A cynical view of menu terminology

the staff that work on passenger ships including cruise ships. The ITWF suggest that in addition to tax advantages FOC allow cruise ships to employ cheap labour on minimal wages with very basic living and working conditions. Whilst this is not true of all cruise ship companies, Seabourn Cruises, for example, have banned tipping and instead offer employees a revenue/profit sharing scheme together with a reasonable salary, but there are a number that still rely heavily on passenger gratuities. In most cases these are administered by the pursers desk onboard the ship. Each passenger's account has a fixed gratuity added each day of the cruise as a gratuity for the stateroom (room) attendant. Norwegian Cruise Lines (NCL) for example, charges \$10 per day for each passenger aged thirteen or over and \$5 per day for those below this age. Royal Caribbean provides vouchers for each passenger printed with prepaid amounts for all service staff other than bartenders. Passengers simply give each of the staff, stateroom attendant, waiter, wine waiter, headwaiter, etc. a signed voucher. Bar drinks are charged to the room account and include a service charge of 20%. Different cruise lines adopt different methods but all allow lower basic wages to be paid, in some cases as low as \$50 per month.

#### Activity

Research and discuss the following. If a cruise ship adopts a fixed gratuity system in order to pay staff a living wage how does this motivate staff? If a passenger believes that the gratuity system is tipping staff in addition to their wages are they likely to consider giving additional amounts? The gratuity system adds about 10% to the cost of a cruise and in some way this becomes a hidden charge, companies like Seabourn, who do not allow tipping but instead charge more for the cruise, so they can pay staff a better salary may either be losing out in market share through higher price or maybe gaining market share as the higher price is viewed as higher quality.

The issue of gratuities will continue to raise debate, some staff see gratuities as a right, some customers feel service staff are just too attentive and somewhat insincere. For managers managing a service where an integral part of the staff income is derived from gratuities there are both practical and ethical issues from deciding whether to be involved at all in the distribution of gratuities to what shifts or work patterns you should allocate to which staff as these may have a bearing on the earning potential. Is a gratuity system the correct way to pay hospitality service staff in the 21st century or will legislation on minimum wages will see gratuities phased out?

In a recent article *Tipping and Its Alternatives* Michael Lynn (2006), Associate Professor of consumer behaviour in Cornell's Hotel School, considers both sides of the argument of conventional tipping, service charges and service inclusive menu pricing. Lynn's research

**Activity**

In the 21st century are gratuities a good method of ensuring that those who work in front-line hospitality service jobs receive a liveable income or has the gratuity culture that typifies this sector been hi-jacked by employers who see it as both a way of continuing to pay low wages whilst at the same allowing them to make attractively priced menu offerings in the knowledge that customers will pay for service. Divide into two groups and defend the argument from each side's perspective.

reveals that 44% of respondents say they would prefer higher wages for waiting staff to tipping but also 69% say they do not dislike tipping. In addition, his research finds 'only a tiny correlation between tip size and customer evaluation of service or dining experience, and points to several potential negative consequences of tipping. These include servers' giving less attention to persons stereotyped as poor tippers (including African Americans, the elderly, foreigners, teens and others); servers inclination to provide free food and or services in expectation of higher tips; and servers' inclinations to focus only on guests at their tables' (Lynn 2006, p. 14).

**HIGH TECH FOOD**

As new technologies in food production emerge, this book would not be complete without mentioning the emergence of high tech foods. In more and more restaurants around the world, chefs decide to use convenience products in their menus either because of the lack of staff in their kitchen or because of the lack of kitchen space or equipment.

But what does high tech food really means? Is there a clear definition?

High tech food can be defined in two ways:

1. As food that has been manipulated at a base level.
2. From a more generic point of view; from convenience goods to high tech equipment.

**Effects of biotechnology**

Biotechnology is an area of scientific research that has developed methods of manipulating genes and ways that would not otherwise naturally occur. The terms Genetically Engineered or Genetically Modified Foods are terms that the consumer today is well aware of. Although the defending side in favour of such foods argues that it is the only possible approach to feed the ever-increasing population, the opposing side argues about the

potential threats to both human health and the world ecological stability. The important point if one is looking at high tech foods in this way is that it can be extremely hard for any chef to guarantee that the menu is absolutely free of genetically modified goods.

The effects of genetically modified goods have spurred a trend towards customers wanting more organic produce. Consumers are far more informed than ever before and their expectations are always on the rise. Customers will often expect Food and Beverage Managers to be able to trace to produce back on the farm it was produced at, and European Law has made it very specific as to what can be labelled as organic and what cannot.

## Convenience goods and high tech equipment

In kitchens today one can find ovens that interface with property management systems, allowing for reports on temperatures, humidity gas or electricity bills allowing for a better allocation of fixed costs per product and ensuring that the operator remains true to the current health and safety regulations. A chef can simply program the oven to cook what he wants, when he wants, as he wants it, reducing labour costs and achieving consistency of product thus meeting consumer expectations. In 1998, McDonalds tested a prototype where a computer-monitored machine dumps frozen fries into a basket that in turn is dunked into hot oil for cooking. The machine then shakes the fries and prepares them for service into bins. Robots prepare drinks and computers instantly convey new orders to robots. The process to deliver an order takes no longer than two minutes! Such technologies have long-term operational, financial and organizational behaviour implications. Production equipment can be already interfaced with point of sale systems. Robots already do serve customers in establishments such as the Yo! Sushi Restaurant in London, UK. Equipment such as ovens can be linked to a PC for reporting, the equipment are installed with temperature and humidity probes and the PC can regulate these, ensuring the food is cooked to perfection and within the health and safety standards. Digital timers can help chefs keep track of time in a busy kitchen. This can reduce overcooked food and wastage. One can take high tech foods even further and use the example of Mr Cantu, the twenty-eight-year-old executive chef at Moto in Chicago, who prepares his sushi on a Cannon i560 inkjet printer rather than a cutting board. He prints images of maki on pieces of edible paper made of soybeans and cornstarch, using organic, food-based inks of his own concoction. He then flavours the back of the paper, which is ordinarily used to put images onto birthday cakes, with powdered soy and seaweed seasonings (Bernstein, 2005).

Information, service and production technologies have undergone substantial advancements in the past twenty years, as those technologies continue to develop the costs of older technology drops substantially enabling smaller operations to afford such technology. It may not be long until a fully automated restaurant

becomes a reality. With today's available technology it is quite possible and for fast-food operations at least, this may very well be the next natural step to their development. In fact in April 2007, 's Baggers<sup>®</sup> the first restaurant with fully automated service opened in Nuremberg, Germany (see the Case study). The restaurant owner and inventor of the service technology claims to have saved millions of Euros on waiter costs whilst there are mixed feelings amongst consumers (Patterson, 2007).

## Summary

The food and beverage industry has always been dynamic and innovative, but the issues discussed above demonstrate that the pace of change, either in consumer choices, ethical operations or technological options, will continue to accelerate and challenge the ingenuity, flexibility and perspicacity of food and beverage managers all over the world.

We wish them every success.

## Further study options

### Case study: 's Baggers<sup>®</sup> – Restaurant of the third dimension

's Baggers<sup>®</sup> Restaurant opened its doors in the town of Nuremberg, Germany in April 2007. A 107-seat restaurant, with plans to expand its capacity by opening a beer garden by mid-September 2007, it has been labelled by the press as the first fully automated restaurant in the world (although it still uses some waiting staff). The restaurant does not require as many service staff as customers order via touch screen electronic point of sale (EPOS) at their tables, enabling a more efficient service and reducing labour costs.



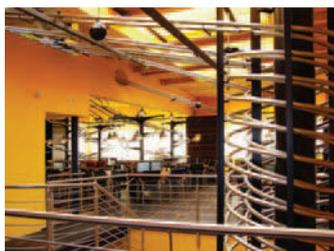
### The concept

#### High quality of food at low prices

Freshly prepared scrumptious dishes cooked with high quality ingredients using minimum fat and a focus on organic produce, offering excellent value for money.

#### Patented technology

Delicious meals and drinks ordered per touch screen are transported on special metallic tracks directly to the guests at the



**Figure 12.1**  
The 's Baggers® rail system



**Figure 12.2**  
's Baggers® easy to use EPOS

table, simply with the help of gravitation (see Figure 12.1). The German Patent office granted the patent for the transportation system in June 2007. 's Baggers® has also applied for the patent in Europe and USA. Due to the high labour cost saving potential of the technology, the restaurant concept could be very interesting for fast-food restaurant chains and the operation is currently developing franchising and licencing concepts.

#### **Restaurant software**

The state-of-the-art information technology offers an incredible increase in comfort for the guests who can get detailed information about food, suppliers, concept, at a touch of a button. Waiting times are minimized and there is no queuing for food. The EPOS technology enables the restaurant to operate a loyalty bonus scheme as well as offering bonuses to customers who evaluate the menu and recommend the restaurant to their friends (Figure 12.2). There is also the added bonus that effective advertising as customers can recommend the restaurant to friends utilizing a word of mouth marketing supported by information technology. One thousand five hundred of the loyalty cards (or Friend Cards) were distributed in the first four and a half months of the restaurant's operation. By allowing clients to evaluate the whole concept the restaurant has constant feedback enabling it to constantly monitor and evaluate the quality of its food and service.

### Restaurant characteristics

's Baggers® is in all respects a Franconian restaurant: Franconian food presented in Franconian dialect (with translation). The whole concept is based not only in the system efficiency but also enabling customers to have fun and a totally different experience.

### An interview with the inventor and owner, Michael Mack

*Interviewer:* Michael, how did you hit upon the idea?

*Michael:* I have always been an enthusiastic cook. Whenever I had a dinner party I was rushing from the kitchen to the dining room. So one day, I thought it would be so much easier if the food slipped along to the guests on its own and so the idea was born. Combined with my experience as a former iron foundry manager I decided to re-invent the traditional restaurant and start a new



*Michael Mack, proprietor of 's Baggers® and inventor of the food rail technology*

generation of restaurants by developing this invention which helps us increase efficiency and comfort substantially and cut costs nevertheless. To realize such a concept you need state-of-the-art service and information technology.

*Interviewer:* So how does the system work?

*Michael:* Well, the customer orders their drinks and food from a computerized touch screen at their table. There are one or two such screens per table. The customers can choose from a variety of delicacies – such as organic beef in buttermilk or sausages with Kraut – all regional Franconian specialities. There are pictures and descriptions of the dishes. Those screens are linked to the kitchen where the chefs put the orders on the rails straight from the oven. The dishes are then delivered to the customer's table on metallic rails. They are gliding down from the kitchen which is located on the upper floor, just by means of gravity. When the food and drinks arrive, they have a colour attached to them which corresponds to the seat so you know who's food is who's (see Figure 12.2).

*Interviewer:* Do the customers like it?

*Michael:* Oh yes! They just love it. It is quite difficult these days to get a table in the evenings. So you should ring early to get your reservation! Another evidence for enthused customers is the number of recommendations the customers can place from the touch screens at their tables: On average we get 90 recommendations a day. Also we offer a customer loyalty card (which we call 'Freundekarte' meaning card for friends). It offers all kinds of benefits for our customers such as a bonus



**Figure 12.3**  
The system in action  
transporting food and  
beverages

system, an optional newsletter or the possibility of direct debit of the restaurant bills at the end of the month. In the first four and a half months 1,500 guests have subscribed already.

*Interviewer:* What if someone has a problem with their order – Is there a person to deal with it?

*Michael:* Definitely! Apart from technology and high quality food another part of the concept is a very high level of comfort for our customers. So there are waiters in our restaurant. But they only do tasks that are for the well-being of our guests. They do not have to take orders or run from the kitchen to the diners. They are there to ensure a friendly atmosphere, to welcome the guests, to answer the questions, to help with problems (to clear the dishes) and so on.

*Interviewer:* What are the future plans for the restaurant – Will there be more of them in other cities?

*Michael:* We are currently working on both a franchising system and a licencing concept. We have had enquiries from Germany, Europe, Canada, Australia and even Korea for franchising and we hope that we can soon open another 's Bagners® Restaurant somewhere else. In addition to that, the patent for the restaurant system has been granted for Germany and we have applied for the patent in Europe and North America. So we can now also sell licences to use the transportation system for food and beverage, which by the way is so delightful because of its simplicity: dishes are sliding down to customers just by means of gravity. Due to an enormous cost saving potential in the labour costs – you *could* run the restaurant with a minimum of service staff – this restaurant concept must be very interesting for the major restaurant

chains. An average fast-food restaurant could save about €250,000 in overheads per year by adopting the concept.

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### Case study questions

1. Discuss the unique selling point of the 's Bagger<sup>®</sup> Restaurant.
2. Perform a SWOT (strengths, weaknesses, opportunities and threats) analysis for the 's Bagger<sup>®</sup> Restaurant technology.
3. Discuss your views of the concept as a potential customer. What are the things you like about the concept and what are the things you may dislike?
4. Discuss the views of the concept as a manager of such a concept. What are the things you like about the concept and what are the things you may dislike?

### Review questions

1. Describe three consumer trends that are likely to affect mid-market restaurant operations in the next five years.
2. What are some of the possible methods an operation can utilize to reduce waste?
3. How can operations reduce their energy bills?
4. How does an operation benefit from buying food locally?
5. What does REIT stand for?
6. Explain asset financing.

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