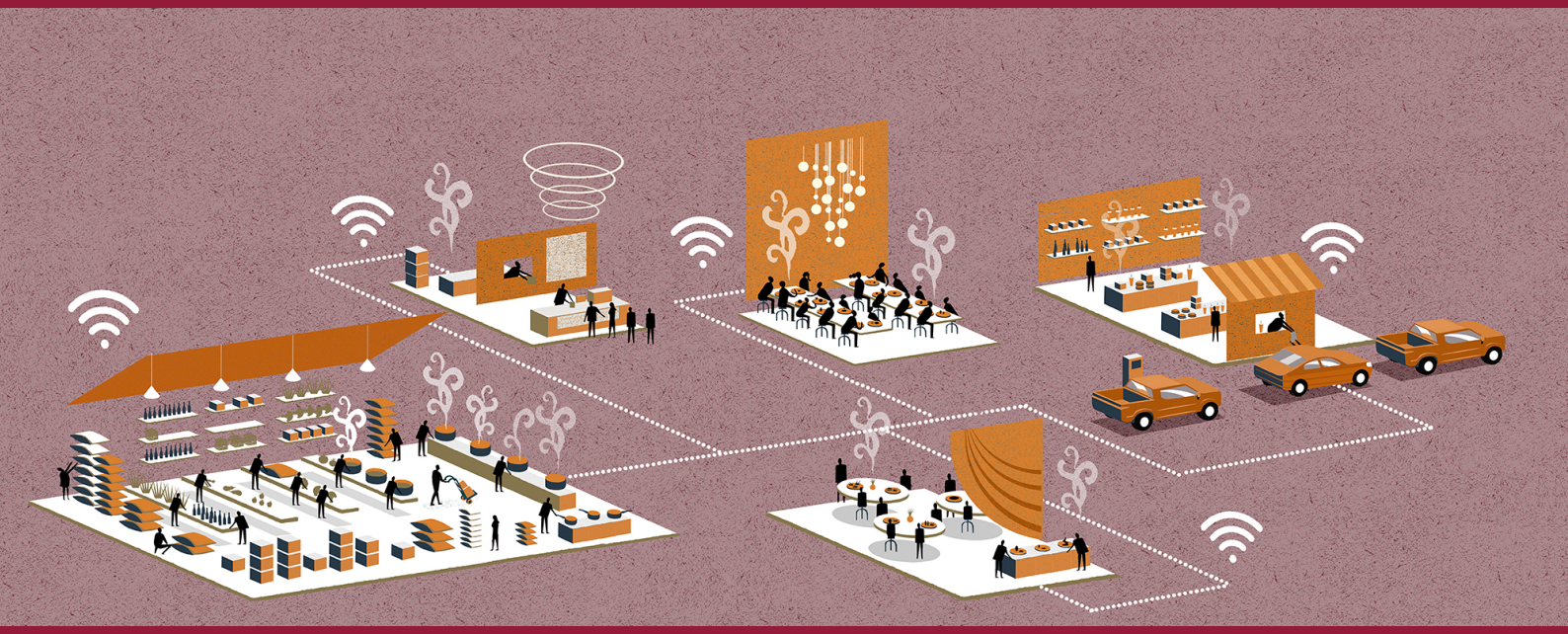

Food & Beverage

FP

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BACKGROUND

Modern life is frenetic, more and more people grab a quick bite during their lunch break and are too tired to cook at the end of a working day preferring to order food from home delivery services or dine at a restaurant. F&B industry produces more than 100 Million meals per day across the world, people from developed countries spend on average 4% to 7% of their income in F&B representing an attractive market, however competition is strong and companies need to differentiate and/or follow the latest trends (e.g. organic food, vegan food, regional cuisine, 'home made' cooking etc) while keeping the standards high both in terms of quality of products and speed of service at the right price.

The whole F&B process, from conceptualization to making and delivery, can benefit from the practices of Lean management in order to build sustainable and profitable businesses. Lean Principles can be applied to all sizes of business, from small stand-alone restaurants to big chains with integrated logistics and central processes or industries supplying catered food.

CHALLENGES

The main challenge is to achieve customer satisfaction. The needs that customer might be seeking to satisfy are:

- Economic: the need for good value for the price paid
- Social: for example a friendly atmosphere, a luxurious environment or an ethnic experience
- Physiological: the need of special food items or to enhance self-esteem and social status perception
- Convenience: the desire for someone else to do the work

Once the needs of the targeted customers are clear, the next challenge is to propose the right type of service. The service of F&B may be carried out in many ways depending on a number of factors:

- The type of establishment
- The type of customer to be served
- The time available for the meal
- The turnover of customer expected
- The type of menu presented
- The cost of meals served
- The site of establishment

In any case it is crucial to produce food and beverage products that conform to quality standards delivered through an excellent service: a nice environment or polite waiters are not enough to overcome the negative effects of poor quality meals and long waiting times.
Quality of products and service must be a constant concern:

- Quality: the challenge for managers is to define quality standards for each product. Then they must supervise and evaluate to ensure that standards are met. Personnel must be trained to follow standard

procedures. Quality standards must be incorporated into production activities through standard recipes, purchases specifications, and proper tools and equipment to ensure freshness and consistency of flavor (in the same restaurant and among branches of the same chain)

- Service: the challenge for managers is to ensure the speed and consistency of service while containing costs and ensuring quality standards. Standard procedures must be developed and personnel trained on them while proper planning of materials, equipment and headcount is essential to get orders or parts of them ready at the right time while reducing waste, inventory and cost for personnel.

Other challenges for the managers in F&B industry include:

- Ensure that all standard cost control tools (standard recipes, standard portions sizes, etc.) be used
- Ensure that the right KPIs (Key Performance Indicators) be chosen and measured
- Update the menu periodically and with the right frequency for the chosen market to follow the latest trends while maximizing profitability (product portfolio reviews)
- Make sure that the right amount and type of tools are available
- Keep personnel trained to constantly comply with required food production procedures
- Minimize wasted food while keeping the right stock to enable proper service
- Make sure that items are stored properly (FIFO, expiry date visible, minimum time out of storage when being used etc) and discarded when expired or when improperly stored
- Track sales and production records to determine how much income each menu item is generating
- Resolve production bottleneck
- Manage equipment, layout, design and energy usage
- Reduce costs without lowering quality & service standards
- Recruit, train, schedule and retain high quality personnel
- Ensure Health & Safety for personnel and customers

FOCUS AREAS

Lean always starts with focusing on customer's needs to effectively improve quality and lead times. Whether your business operates in catering or as a restaurant chain (either slow food or fast food), customer satisfaction drives your sales and improves your production, which in turn leads to improved quality, faster service, cost savings and more flexibility. We use a holistic approach that applies Lean principles to improve your entire production & logistic systems and not just individual process steps. Involving all departments with a joint goal of reducing waste can produce and sustain long-term improvements.

AREAS OF WASTE OFTEN IDENTIFIED IN F&B ENVIRONMENT:

- Rework / defects: wrong cooking time, poor quality of materials used, lack of cleanliness drive down product quality while poor application of standard recipes and poor training drive up inconsistency of taste: both have the effect of increasing returns from customers
- Waiting time: this type of waste can be found everywhere along the supply chain. For example kitchen operations might be delayed by a late delivery from the central warehouse or from suppliers thus causing waiting time and idle operators. Kitchen operations may also delay one each other when not synchronized, for example part of a dish might be ready and loosing freshness while waiting for other components of the same dish to be ready and/or to be assembled. Waiting time frequently also affect the customer, for example take away customers may have to wait due to long ordering processes, delays from the kitchen or delays in the assembly lines, dine in customers may have to wait due to unavailability of waiters, unavailability of seating space, delays from the kitchen or delays in the assembly lines, home delivery customers may have to wait due to inefficient central ordering

system, delays from the kitchen, delays in the assembly lines or inefficient delivery services

- Transport: this type of waste is driven up along the supply chain by inefficient logistics, for example when deliveries from central kitchen to branches or home delivery vans are not utilized at optimal fill rate and their routes are not optimized. Transportation is also driven up by disconnected processes both inside central kitchens and branch kitchens
- Space: an inefficient utilization of space in the kitchen increases transportation and rental cost. Another example of waste of space can be observed when dine in table set up and layout are not aligned with average customers group size thus limiting space utilization and causing customers to leave due to unavailability of tables
- Inventory: food related products are affected by an average short shelf life therefore it is important to set inventories at the right level to preserve freshness, optimize the utilization of storage (cold, room temperature and heated) and reduce waste
- Movement: excess movement slows down operators and increases their fatigue driving down their attention level and performances thus affecting service to customers
- Unused skills: high specialization of roles in modern kitchens drives down efficiency by limiting flexibility across roles
- Overproduction: it occurs when planning and forecasting are not aligned with customer demand and when long lead times force to produce ahead of customer demand ('push' production). Overproduction drives up most of the above wastes.

LEAN SOLUTIONS:

The starting point when applying Lean Principles to F&B industry is a Value Stream Analysis covering from the moment when an order is placed to a supplier to the moment the product is delivered to the end customer: the Value Stream Analysis highlights the waste embedded in the process and enables the identification of a prioritized set of solutions used to build the ideal Future State and a re-defined production system.
Another analysis to be conducted early is the Product Portfolio Review to identify 'bleeders' and identify actions to maximize the profitability of menus.

Once the product portfolio has been optimized the focus is moved to the implementation of the the new production system on a Pilot branch, on the Central Kitchen and on the Home Delivery service.
After the first pilot is ready and the production system fine-tuned based on the feedback from its implementation, it can be rolled out to all the branches.

Lean can also be applied to administration processes such as:

- Lean Procurement, to reduce the lead time from purchase requisition to the release of a purchase order and leverage on the centralization of Procurement processes
- Lean product development, to design dishes and their optimized production process simultaneously and to reduce product complexity
- Lean HR, to benefit from the centralization and improvement of HR processes such as hiring or vacation management
- Lean Finance, to minimize handovers, shorten approval chains, reduce FTEs required per process and reduce lead times
- Lean IT, to improve availability of IT when required
- IBP (Integrated Business Planning), to connect the core processes of the company with the market thus improving organizational alignment and financial performance

TANGIBLE IMPROVEMENTS:

Lead time

- Take away customers' waiting time from average above 20 min to average below 2 min (-90%) and peak waiting time for take away customers dropped more than 80% by introducing 'just in time'
- Dine in order distribution layout improvements leveraged on kitchen improvements reducing delivery to customer time by 63%
- Home delivery preparation time from 31 minutes to 16 minutes (-48%)

Quality

- Risk of cross contamination in the branches' kitchen and in the Central Kitchen eliminated by separating flow of raw and cooked products
- Freshness of products increased by implementing storage standards, speeding up lead times and pulling materials from storage just in time
- Hygiene and safety improved thanks to the introduction of sanitizing stations and standard procedures

Cost

- 15% to 20% headcount reduction per branch by implementing a new vacation plan
- Dine-in layout optimized to accommodate for the right group size of customers thereby increasing capacity by 34.5% and consequently the sales by square meter (+14%, measured 2 months after implementation)
- Up to 70%* of the water used for rice washing saved within the process or recycled to other processes
- Central kitchen delivery-to-branch vans re-scheduled to operate according to the value stream model saving 15% of the vans
- Work in progress inventory reduced by 60% by implementing a Kanban pull system

Should you be interested to know more about our Lean services regarding this topic, then please contact us:

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