

Profitable New Product Introductions

The Food Industry's Survival Kit

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Our special recognition goes to the members of the Food
& FMCG knowledge network. The white paper reflects the
findings of interviews and discussions with the participating
companies.

An EyeOn white paper

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Management Summary

One of the major challenges in the food industry is being successful with New Product Introductions (NPIs). This is not only a general business issue, but also a key theme for Forecasting & Planning in the Food & FMCG industry.

The demand uncertainty of New Product Introductions brings in challenges in managing both time-to-market and time-to-volume, but is at the same time critical for the bottom line result of new product introductions. This puts a lot of pressure on the ability of companies to align their processes towards the launch of new products.

This white paper is the result of a series of interviews and a network meeting with the members of the Knowledge Network on Planning & Forecasting in the Food and FMCG Industry in September-November 2006.

In the first section the general trends & innovation drivers are described. The main drivers for new product introductions are increasing competition, to achieve profitable growth, changing demand and the increasing pressure on cost prices. To be profitable with new products it is of utmost importance to introduce new products faster and better than competitors do. This emphasizes the importance of a well- managed NPI Forecasting & Planning process!

In the second section current practices in managing the NPI forecasting and planning process are described. Collaboration on NPIs with suppliers and customers is no common practice. Supply chain management is not always involved in the earlier stages of the innovation process. Tools to support the NPI process are only limited available and companies are often not satisfied with these

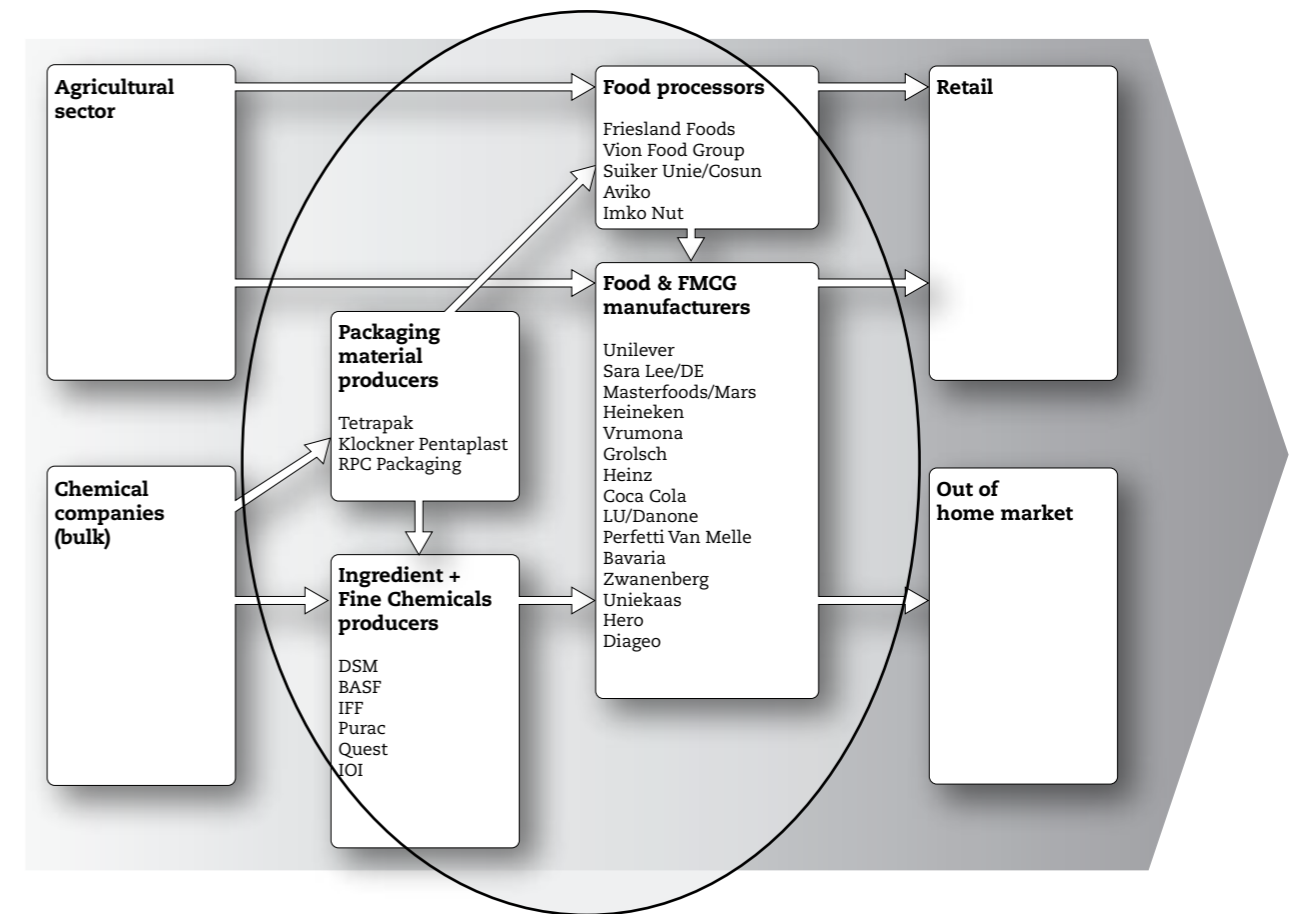


Figure 1 Participants Knowledge Network Planning & Forecasting in the Food & FMCG Industry

tools. Only about half of the participating companies actively use key performance indicators to monitor the innovation process. Having up-to-date NPI data available is already difficult within the companies but especially between partners it is a difficult hurdle to overcome.

In the last section it is made clear that a responsive NPI forecasting & planning process is a key success factor for profitable NPIs. Six guiding principles to tackle the pitfalls are presented:

- Top management focus: create an organization structure in which innovation is stimulated and facilitated
- Combine overall project responsibility with differentiated operational coordination
- Show SCM attitude: selling added value
- Design for supply chain flexibility
- Make information a key factor
- Introduce NPI performance management: make it measurable

These guiding principles will help to provide companies in the Food & FMCG industry with a well-stocked survival kit of profitable new product introductions!

New Product Introductions: Trends, Drivers & Challenges

Changing landscape: what are the trends?

As described in the paper 'Forecasting & Planning in the Food Industry' (Vriens, Versteijnen, 2006) the food industry

Trends in the Food Industry

- Consumer interest in convenient, fresh and healthy products
- Increasing influence Retail
- The Power of Private Label
- Strong price pressure/ margin erosion
- Growth of Out-of-Home
- Shorter Product life cycles
- Increasing number of New Product Introductions

went through big changes. Consumers' interest in general health and wellness (ACNielsen, Summer 2006) and the preference for convenient, healthy, and fresh

food play an important role in consumer behaviour. Although price still plays a crucial role in a consumer's decision-making process, the willingness of consumers to trade price for e.g. health benefits creates a number of opportunities for manufacturers.

The increasing influence of Retailers changed the 'balance of power' resulting in increased pressure on prices and a vigorous battle for a place on the supermarket shelf. Private Labels gained more market share both because of wider consumer acceptance and the growth of discounters like Aldi (Aberdeen, June 2004), where Private Label products account for approximately 95% of sales.

A lot of companies in the Food Industry also operate in the growing out-of-home market (restaurants & bars, business canteens, petrol stations, institutions, fast food chains). This segment is often used by manufacturers to brand products with the expectation that the consumer will eventually buy the same brand at the retailer. But there are significant differences for out-of-home compared to retail:

- Many different players and therefore less well-organized than retail
- The marketplace approach is more push (manufacturers' initiative) than pull (customers' initiative)
- Manufacturers play an important and

- leading role, especially in the process of developing and introducing new products
- Setting up efficient distribution channels is complicated.
- The behaviour of customers in this market segment is more difficult to predict and more driven by impulses

As a result of the above-mentioned trends Product Life Cycles are getting shorter and shorter and the development of new products is becoming more important. Studies (Robert G. Cooper, 2001) found that more than three-quarters of consumer companies view new product development as a leading driver for revenue, profit, and market share growth. And more than two-thirds of these firms will rely on new products to contribute a growing portion of total revenues over the next three years.

New product introductions can generally be put into one of these categories:

- A product produced before, but undergoing a modification
- A product not previously produced by the company, but a similar product exists in the market
- An existing product presented to a new market
- A totally new product to a new marketplace

The division of the total number of new product introductions among those categories, based on the EyeOn survey, is depicted in the table below.

% NPI	Product		
	Existing	New	
Market	Existing	40%	25%
	New	26%	9%

Table 1 New Product Introduction related to Category management

Although a relatively low part of all NPIs are related to totally new products most impact is on the product development processes themselves, to related project management and on the amount of money involved. Furthermore, the risk and hence failure rate is also much higher. For every seven new product ideas, only four make it to development and then only one is introduced (Robert G. Cooper, 2001). After introduction, about 60% of totally new products launched are actually a success and only a very small percentage is still on the shelves after 3 years.

To increase the success rate many food manufacturers have transformed over the years from being technically driven developers towards more market and consumer oriented innovators. Investigations (Arthur D. Little, 2005) show that companies which are considered as real innovators achieve a considerable percentage of their turnover coming from new products, especially in the FMCG industry. Also these companies show that their revenue share of new products compared to R&D cost as a percentage of revenues is much higher than the global average.

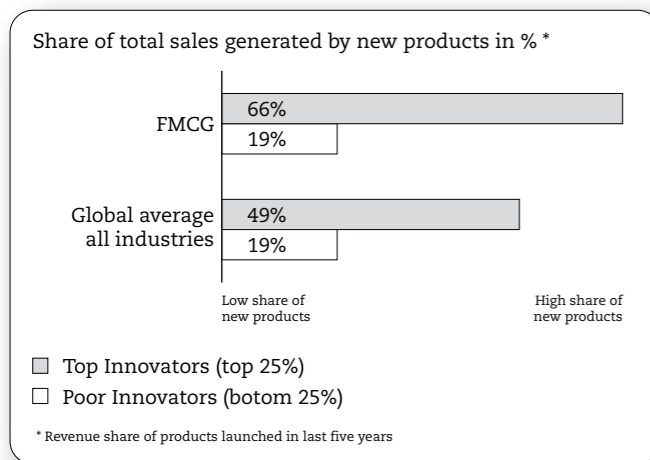


Figure 2 Sales share generated by new products

Renewed focus on NPI: what are the main drivers?

The interviews with the network participants gave a good overview on which drivers were perceived important or very important for the renewed focus on NPI within the industry. In Figure 3 we can see the ratings per NPI driver. In the next paragraph we are going to elaborate on the most important drivers.

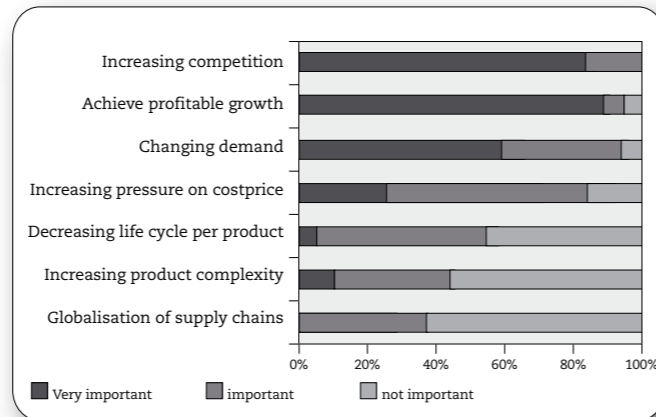


Figure 3 Drivers for NPI

Increasing competition

Retailers and discounters are fighting for a piece of the consumers' pie and use their scarce shelf space and private labels as a 'weapon'. The manufacturers are fighting for their spot on the shelf and are trying to get awareness from the retailers and, even more important, from the end consumer. By introducing innovative and exclusive new products manufacturers try, in close competition with private label manufacturers who sometimes start their own innovations even faster than A-brands manufacturer, to create the best proposition.

Achieve profitable growth

Especially big retailers used their buying power in recent years to demand lower prices from the A-brand manufacturers, who were forced into all kinds of (price) promotions to retain or even regain their shelf positions. In their turn manufacturers used their buying power towards their ingredient and packaging suppliers to regain part of the lost margins. However, the decreasing profit margins throughout the whole value chain resulted in cost cutting actions and in reconsidering strategies about new product introductions.

A food manufacturer:
'As result of price-war NPI investments were almost zero.'

Some companies drastically reduced their budgets for departments such as Research & Development and Marketing. Companies, rationalized their brands, even premium A-brands, in the meantime focusing research, and marketing budgets to a more limited number of brands.

Some companies only reduced their promotion budgets but for many companies there was a clear negative impact on the number of introductions of new products (see (1) in figure 4). The number of newly introduced products decreased by 13% in 2005 compared to 2004, (Kregting, 2006). However, many companies realized that cost cutting as a way to stay profitable is not easy to maintain over time and will eventually lead to competitive disadvantages. To improve profit margins and to (re)gain market share these companies resorted to introducing more profitable new products (see (2) in figure 4) that appeal to the consumer.

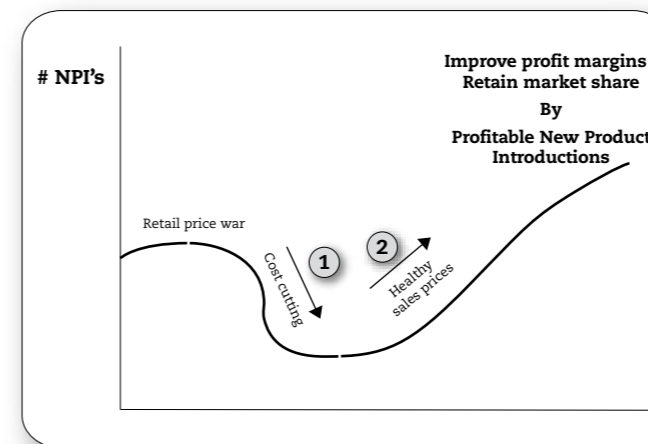


Figure 4 Impression on the number of NPI's during the last few years

Changing demand

In the consumer market the strong move towards convenient, fresh, and healthy products clearly accelerates the introduction of new products. Also the ingredient and packaging manufacturers experience the need for innovative solutions to accommodate these new products. They try to win a 'design-in' by being the first with a new concept for e.g. low-carb products or a convenient new packaging form.

Increasing pressure on cost price

As already mentioned, the vigorous competition between A-brands and the increased importance of private labels negatively influenced the profit margins in the whole Value Chain. Globally (ACNielsen, 2006), the price of Private Label brands is, on average, a third lower than manufacturer brands. Especially existing products with a lot of comparable alternatives from competitors are subject to strong price pressure. The A-brand manufacturers have to come up with better and cost efficient ways, such as using other, cheaper ingredients or other package sizes.

New Product Introduction: the challenges

The demand uncertainty of New Product Introductions brings in new challenging aspects in managing time-to-market and time-to-volume, but is at the same time critical for the bottom line result of a new product introduction. This puts a lot of pressure on the ability of manufacturers to align their processes towards the launch of these products.

Aspects such as pipeline filling, phasing-in and phasing-out and up-scaling of production capacity have to be handled well to make sure the competitive advantage of a new product introduction is not lost quickly. Master data has to be available, ERP systems should be set-up, and planning of new products should be integrated within existing S&OP processes. New products have to be promoted by using new advertising strategies and customer service departments have to be trained and so on.

The ability of especially Private Label manufacturers to quickly copy and introduce

similar new A-brand products also puts pressure on the organization of an NPI process. Manufacturers have to adapt quickly and act as agilely as possible to upscale the production capacity on short notice. Due to the shortening product life cycles, the payback time (or in other words: time-to-profit) for new product introductions should be very short. Forecasting of these new products is therefore very important and embedding new products in regular S&OP processes is essential.

As already stated in the Whitepaper 'Forecasting & Planning in the Food Industry' (Vriens, Versteijnen, 2006) and stipulated by the participants in the EyeOn knowledge network 'Planning & Forecasting in the Food Industry' New Product Introduction is not only a general business issue, but one of the key themes for Forecasting & Planning in the industry.

To be profitable with new products it is of utmost importance to introduce new products faster and better than competitors do. This emphasizes the importance of a well-managed NPI Forecasting & Planning process!



Figure 5. Key issues planning & forecasting

Managing the NPI Forecasting & Planning Process: Current Practices

Innovation, whether or not it is achieved by continuous improving or by breakthrough innovations, should be embedded in the organization and the organization should 'breathe' the fact that it is innovative. This can only be accomplished when innovation is customer and market driven and incorporated in the organizations' strategy, structure, and processes.

As described in the first section, successfully managing new product introductions is key in today's food and FMCG landscape. Therefore this chapter will focus on managing the NPI process and the essential role of planning & forecasting in this process.

Stages in the Innovation funnel:

- Stage 1) **Idea:** identifying a trend in the market place and then prospecting for an opportunity to realize that trend.
- Stage 2) **Feasibility:** evaluating the idea and the opportunity. This requires hard data, analysis, market research, and sometimes proof of concept. Feasibility phases are often embedded in R&D/Marketing related areas within companies and work is mostly done via desktop research.
- Stage 3) **Capability:** refining the feasibility study, making final choices and implementation planning. It answers the "how to" question by planning the necessary activities.
- Stage 4) **Implementation:** the actual realization of the idea starts. It focuses on elaborating the marketing strategy and implementing the organizational requirements to commercialize the innovation. After the innovation has been developed, it is tested or piloted to show that it performs according to expectations.
- Stage 5) **Launch:** this is where stock is produced and distributed to customers. The product in which it is embodied is delivered to the market place. The progress of the innovation requires close monitoring in this phase to make adaptations whenever necessary.

Innovation funnel approach

Successfully managing new product introductions necessitates the use of a proven and common approach. Most companies have adopted the innovation funnel, also known as the stage-gate™ method introduced by Robert G. Cooper.

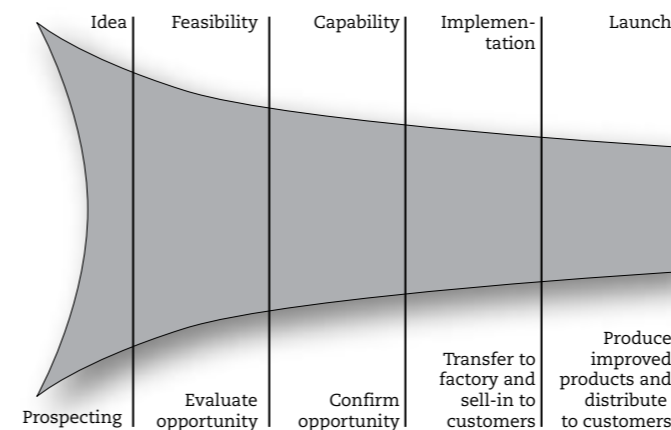


Figure 6 Stage-Gate model

By defining different stages in the development process, the funnel is a tool that can be used as an effective blueprint for managing the entire new product process, from the initial idea to the launch of a product.

The process is managed via a number of predefined stages, enabling milestones and decision moments. Each stage consists of a set of cross-functional and parallel activities which must be successfully completed prior to obtaining management approval to proceed to the next stage. The entrance to each stage is called a gate. Gates should have a common format in which deliverables, criteria, and output are clearly defined.

Gates control the process and serve as: Quality control points, Readiness-checks, Must-Meet criteria and Should-Meet criteria; Formal Go/No Go decision moments; Marker for action plans and decisions for the next stage. Especially at the gates decisions are taken which are closely related to planning & forecasting processes (see next paragraph).

However, as mentioned by a number of companies in the EyeOn survey, for successful development actions, decisions and results during the course of the development process should be reviewed and evaluated, to improve the process for future developments. Therefore the funnel needs to be extended with a formal evaluation stage.

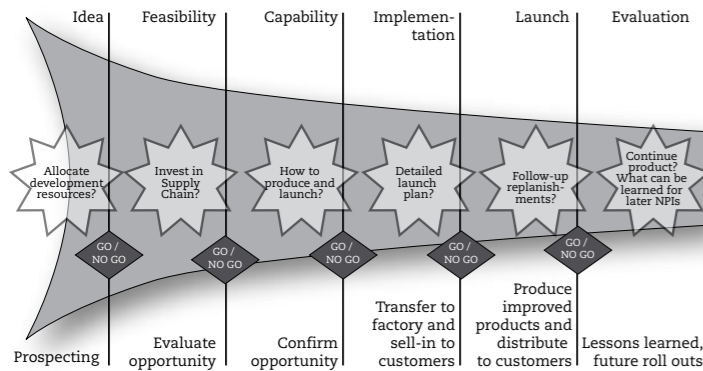


Figure 7 Stage Gate decisions

Stage 6) Evaluation: Evaluate the success of the launched product in order to decide if the product can be recommended to other sales organizations. Decide if follow-up roll-outs will be planned. Derive lessons learned for other NPIs.

NPI Forecasting & Planning

In each stage of the funnel critical decisions like 'how do we allocate resources throughout the funnel' or 'should we produce in a new supply chain' have to be taken and need to be addressed in time. Examples of such decisions are depicted in the funnel in Figure 7. To take accurate decisions the role of planning and forecasting is vital. The planning and forecasting process must be arranged in such

a way that relevant information can be shared rapidly, efficiently and transparently within the organization. Based on the model for a responsive forecasting and planning process (Vriens, Versteijnen, 2006) the following section describes current practices in NPI forecasting and planning related to the aspects of transparency, efficiency, and speed.

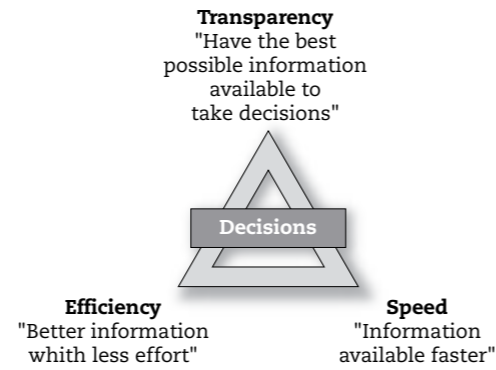


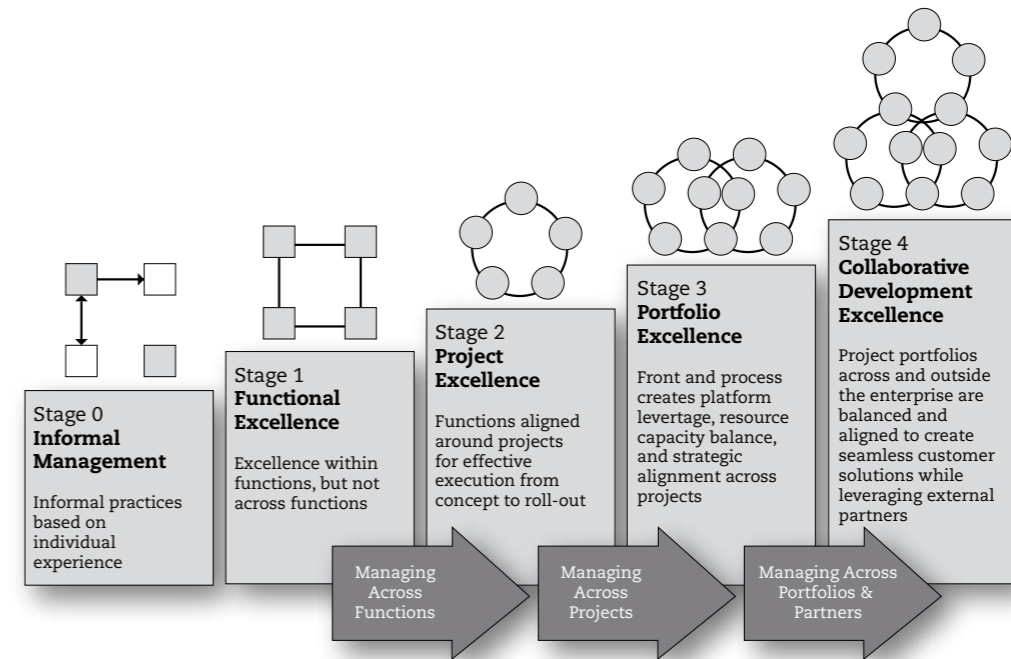
Figure 8 model for a responsive forecasting and planning process

The following key areas in NPI forecasting and planning will be discussed:

- Internal and external NPI collaboration
- Involvement of supply chain management
- NPI supporting tools
- NPI supporting key performance indicators
- (Master) data availability

Internal and external NPI collaboration

Looking closer at the organization around New Product Introductions, a cross-functional approach involving the most important business functions has proven to be the most effective. Also early involvement of suppliers and customers can contribute significantly to the success of an NPI. To describe the different stages of collaboration (internally as well as externally) the model of maturity stages in figure 9 is used, indicating how far innovation is incorporated in the organizational framework.



Source: Stages of Product Development Maturity for Product and Cycle-time Excellence (Pittiglio Rabin Todd & McGrath, 2002)

Figure 9 Maturity stages

In short the maturity stages in product development processes are explained below:

- Stage 0) **Informal Management.** Product development is unstructured and dependent on individual experience. Performance may be good for a very small company, but the informal approach is not sustainable and is a liability to a larger, growing enterprise.
- Stage 1) **Functional Excellence.** Companies at this stage have defined processes within individual functions, but these processes are not integrated across the business. Time to market is slowed by serial, "over-the-wall" interactions.
- Stage 2) **Project Excellence.** The concept-to-market process is integrated across functions and is supported by focused, cross-functional teams and business-driven decision making. Intimate understanding of customer needs allows teams to develop targeted, winning products.

- Stage 3) **Portfolio (Category Management) Excellence.** Explicit processes facilitate translation of business strategy into robust market, product, and technology strategies. Planning techniques enable platform leverage. Senior management regularly assesses and refines portfolio balance. New opportunities are rapidly identified and selected, and projects are staffed and executed, based on strategic merit.
- Stage 4) **Collaborative Development Excellence.** The development chain is configured to fully utilize core competencies and maximize R&D throughput by leveraging capabilities of development

To ensure that the appropriate departments within the company are involved in the process, a majority of the companies interviewed have special Product Introduction Teams, involving all relevant functional areas (stage 2).

These teams are often responsible on a project basis for all aspects of the project, from initial idea generation to final commercialization, usually reporting to higher management. Companies cannot afford mistakes in innovation and introduction of new products to the market. Not only the innovation itself is important, but also adequately managing the process leading to – eventually – a successful launch is crucial.

In the research, carried out by Eyeon in September-November 2006, a clear difference can be identified between the suppliers (ingredient and packaging manufacturers) and food manufacturers (incl. food processors). Manufacturers not only tend to collaborate more within the company, but some also indicate to have strategic development upstream (suppliers) and downstream (customers) alliances. On average (see Figure 10) the suppliers are in-between stage 1 and 2 (average 1.7), whereas the manufacturers are generally in-between stage 2 and 3 (average 2.3).

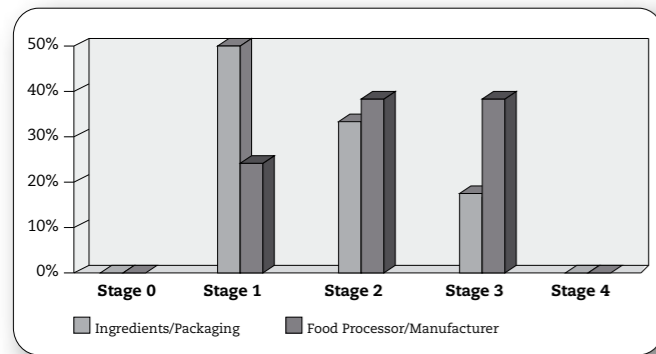


Figure 10 % participants per maturity stage

All participants have the aim to at least reach Stage 3, Portfolio (Category Management) Excellence, the alignment of strategic processes and plans to drive innovation and portfolio balance. Stage 4, the development of Chain Excellence, the most mature stage for innovation, is a strategic goal for nearly 50% of the manufacturers interviewed in the Food industry.

The companies which do not aim for Stage 4 and define stage 3 as their goal, view retail not only as a customer but also as a (potential) competitor. As a consequence cooperation with both retail and suppliers, who work for potential competitors, is not considered a strategic goal.

External collaboration in the first stages of the funnel between two companies is only done when it is strategically beneficial for both parties (e.g. developing a new packaging for sweets which positions the sweets in a completely new way in the market or a flavour development which could introduce a complete new meal-kit line). However, cooperation in the first stages does not guarantee collaboration in the implementation and launch phase.

A Food manufacturer:

'I expect my supplier to be flexible and simply react fast on new introductions.'

Involvement of supply chain management

The EyeOn survey shows that in the majority of companies SCM is involved from the Feasibility/Capability stage. However, in these early stages, the role of SCM is mostly limited to basic information exchange.

According to the participants in the EyeOn survey the following five topics need dedicated focus of supply chain management to make new product introductions a success.

Production capacity

Rated as one of the most relevant topics, production capacity should be sufficient and flexible enough to deal with best-case scenarios. Anticipating is essential in this aspect. A good contingency plan should be available to overcome any hurdle. Abilities to outsource production before investing in expensive

production capacity will help. Other aspects, like the effects of the channel loading plan of a new product on specific line capacity, the 'make-ability' of new products in the existing infrastructure, up-scaling capacity (time-to-market and time-to-volume) and flexibility should be part of this contingency plan as well.

Supply chain set-up to cope with uncertain NPI sales

Setting up the supply chain and balancing between big lot sizes for mature products and initially smaller lots for new products is seen as a big challenge for many companies.

The penetration degree of NPI is very relevant to this aspect and has to be monitored thoroughly to be able to set up an effective supply chain. Depending, for example, on the customers' requirements, the (initial) pipeline-fill will largely depend on the end-distribution concept. The set-up is different if the product is shipped to central warehouses, or directly to points-of-sales. Also setting the right stock policies largely depend on the customers' ordering policies and furthermore depends on the frequency of replenishment.

S&OP in relation to channel loading & follow-up replenishment

Most participants have well described and procedurally embedded processes to fill the distribution channel for the first time. The first pipeline fill is often treated as part of the project organization of launching new products. Companies in the Food value chain cannot afford to miss out on the often pre-defined launch moments to retail.

Channel loading, however, is more than just the first load. Follow-up replenishments are much more difficult to predict. In this stage responsibilities are subsequently handed over to regular S&OP structures (from project to process).

To manage follow-up replenishments effectively, avoiding stock-out situations, supply chain management should have early access to actual sales figures at point-of-sales and monitor forecast accuracy as closely as possible. Most companies interviewed indicate that this aspect has a very high improvement potential.

Phase-in & phase-out

Phasing out old products, in the meanwhile phasing in new products is a challenging task for most companies. While product life cycles are shortening and the integral supply chain costs need to be decreased, the balancing of time-to-market/time-to-volume and minimizing risk of obsolete stock is essential. When not managed well it has a direct bottom-line impact on working capital and profitability.

How can we avoid an explosion of SKUs as a result of the renewed focus on new product introductions? Actively managing of the brand's portfolio in the value chain has become a challenging new task in which SCM can bring added value. Earlier understanding of the product-life status of all SKUs is essential to pro-actively avoid out-of-stock of fast movers and weed out the non/slow movers, avoiding obsolesces.

Sourcing

A new product can contain new raw materials. These may implicate introducing new sourcing activities that can have considerable lead times. Another risk might be that the R&D department has used raw materials in the design which are almost impossible to source in the volumes required for ramped up production. The right choice of raw materials and suppliers is crucial for the profitability of new products and SCM should play a key role in this process.

NPI supporting Tools

On the question which tools are used to support the NPI planning process, over 20% of the Food network companies report not to use any tool.

A large part of the respondents report to use tools such as ERP systems or spreadsheets, not particularly developed to support managing the innovation process. The most common tools used to manage the process are mentioned in Figure 10.

Only 15% of the participants report

the use of specific tools such as workflow management applications to support the NPI process during the various funnel stages within their companies.

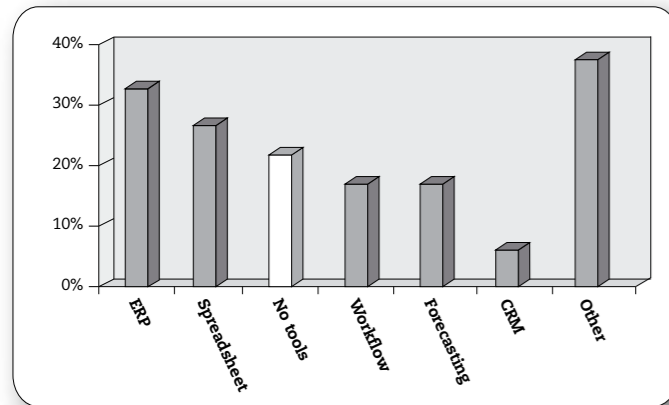


Figure 11 NPI supporting tools

An ingredient manufacturer: 'We have the IT tools for demand forecasting, but they are generally not equipped for managing New Product Introductions'

Only 46% of the food manufacturers and 17% of the suppliers report to be satisfied with their tools. Especially amongst the companies which introduce

relatively large numbers of new products per year, the need is felt to invest towards workflow applications. These tools enable companies to manage multiple introductions, in different stages of development, simultaneously.

NPI supporting key performance indicators

58% of the participating food manufacturing companies indicated to actively use Key Performance Indicators (KPIs) to manage the innovation process. In more upstream companies (ingredient manufacturers and food processors), characterized by a significantly smaller number of new introductions per year, this percentage is lower, being a mere 42%. This can be explained by the positive correlation between the number of new introductions per year and the use of KPIs. Some of the KPIs that were mentioned are:

- % on time launch
- compliance to customer demand
- attrition rate (% going to next stage in NPI process)

- payback time
- forecast accuracy, specifically for NPIs
- % sales from NPIs
- service level for NPI
- % obsolete for NPI
- % consumer complaints related to NPI

(Master) data availability

When managing a process effectively throughout the organization, data consistency is a critical factor. Are all departments talking about the same sales expectations (one number planning) during the process and is data not distorted, while being processed from department to department? From the preliminary stages of the NPI process (Idea stage) correct and consistent data is of crucial importance. Information about expected sales volume, ordering policies, minimum stock levels, and phase in/out should be (centrally) stored and distributed at an early stage. The respondents of the network indicated inconsistent and/or incomplete master data as one of the issues to be improved.

Exchanging data between partners in the value chain has proven to be a difficult hurdle to overcome. Especially downstream – towards retailers – information sharing and data gathering is not commonly done. In which stage is it wise to transfer data, which is critical for your company, but possibly beneficial for your partner (supplier or customer)?

Make New Product Introductions more profitable: Tackle the Pitfalls

As indicated in the previous sections the marketplace has changed enormously over the years, making innovation more important than ever, and at the same time much more difficult. To be successful it is not enough to be first on the market (short time-to-market). Equally important is a fast ramp-up (short time-to-volume) to prevent empty shelves and, due to the shortening product life and increasing competition, a short period to capitalize on the investments made (short time-to-profit). A well- managed, responsive NPI forecasting and planning process is essential to make sure the conditions are set to achieve these three drivers for profitable new product introductions (Figure 12).

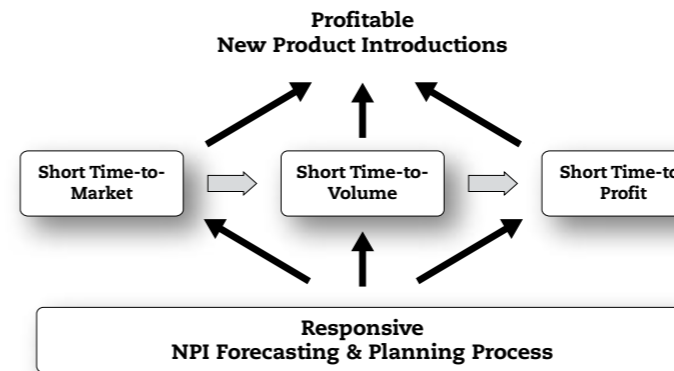


Figure 12 From Responsive planning to Profitable introductions

In this section pitfalls for a responsive NPI forecasting and planning process are discussed. Finally six guiding principles are presented to tackle these pitfalls.

Pitfalls – which hurdles to take

Based on the EyeOn survey and a discussion held amongst the participants ten possible pitfalls related to managing the NPI process were ranked on their relevance (Figure 13).

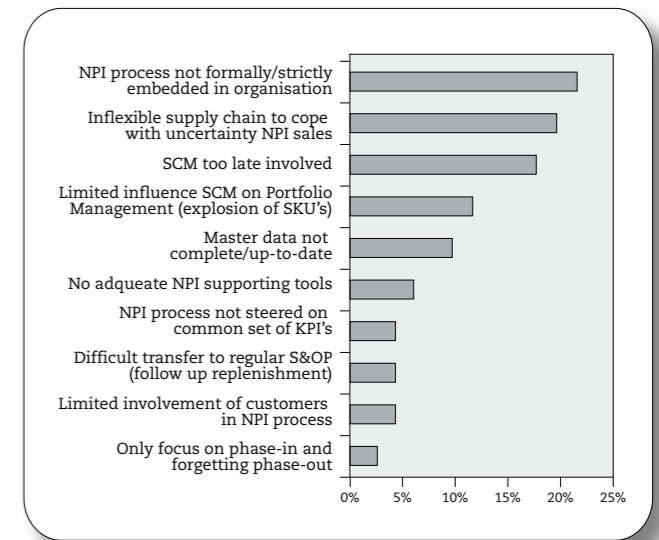


Figure 13 Ten pitfalls for a responsive NPI forecasting and planning process

In the next paragraph the Top-5 pitfalls are described.

Pitfall 1 - The NPI process is not formally/strictly embedded in the organization

Many organizations do not have formal

An ingredient manufacturer: 'Formally there is an S&OP process (including NPI's), but this is not imposed upon the account managers

structures and/or managerial guidelines to be able to act as an innovative company. In the interviews in the food

industry it was clear that all companies are working to support innovation processes throughout the entire organization in the best possible way. But still resources are often not centrally allocated, (top) management attention is not clearly visible and the process is insufficiently monitored and measured. As a consequence sub-optimal processes within departments are common practice, forgetting that an integral approach for the company is essential.

Pitfall 2 - Inflexibility of the supply chain to cope with uncertain NPI demand

Initial sales of new products are hard to predict. First channel loading might be predictable, but what about follow-up replenishments? How to set up the supply chain in order to be cost effective and yet flexible at the same time? Producing new products can be conflicting with the current set-up of the operation, where flexibility (meaning having ample capacity) costs money ('we can not make the trial batches now, because capacity is already limited'). But even when enough flexibility is available within the company the supplier of critical ingredients or a subcontractor can be a limiting factor when a new product is more successful than expected.

Pitfall 3 - Supply chain management is involved in the NPI process too late

The first stages of an NPI process are often regarded as "idea and creative phases". In many organizations SCM is hardly involved, being looked upon to be too 'fact based', putting a brake on creative processes. The very first phases are mostly confidential with only a small number of people involved. Involving SCM too late often leads to issues later on, like the choice of a rare/expensive raw material, not being able to produce the product according to the specifications or lacking sufficient production capacity when the pipeline is being filled.

Pitfall 4 - Limited influence of SCM on the product portfolio

With more focus on innovation, a proliferation of the current portfolio of products (SKUs) could be the result. Sales and marketing within organizations often prefer to keep the portfolio as extended as possible. The consequences, however, for the organization could be disastrous (small/ inefficient production batches, capacity peaks, obsolete stock and full warehouses). Earnings made from new products possibly finance slow-moving or obsolete stock of other products. Often organizations do not have mechanisms for rigorous portfolio management.

Pitfall 5 - Master data not complete/not up-to-date

Non consistent and no up-to-date master data make an effective decision taking process very difficult. Capturing data too late (e.g. introduction dates, raw material needs, production capacity needed) and not making it transparent to all parts of the organization, make it difficult to deal with a new product launch. Often the scattered system landscape plays an important role. The operational ERP system is not equipped to deal with NPI projects and the home-built Excel tool for the follow-up of the different project steps is not fulfilling the information needs.

Challenge the pitfalls – 6 guiding principles

Closer analysis of these pitfalls makes it clear that companies – with a renewed focus on new product introductions - need to take action, to be able to manage innovation successfully and – as a result - innovate more profitably. In the remainder of this section a set of 6 guiding principles for profitable new product introductions is presented (see Figure 13)

1. Top management focus: create an organization structure in which innovation is stimulated and facilitated

Top management should focus on the involvement of all relevant departments, making sure that innovation is not only a 'sales & marketing party'. Multi-disciplinary teams (NPI teams) and regular cross-functional NPI meetings provide the advantages of multiple sources of communication, information, and perspectives, inclusion of downstream concerns in upstream product development,

a clearer line of sight to the customer, and speed-to-market, which is critical in today's competitive marketplace. This process can be stimulated by an appropriate remuneration package, which not only values Sales for achieving additional sales out of new product introductions, but sets integrated targets for all departments involved (e.g. if the phase-out management has resulted in zero-obsolete stock).

A food manufacturer:
Since the introduction of cross-functional NPD teams, SCM is able to manage product transitions more successfully.

2. Combine overall project responsibility with differentiated operational coordination

Adopting a proven methodology like the stage-gate™ model will secure that critical milestones and formal go/no go decisions are built in the process and formalized. Clear procedures, responsibilities, and accountabilities should be assigned from the very first stages of the innovation process. Overall project responsibility should be at

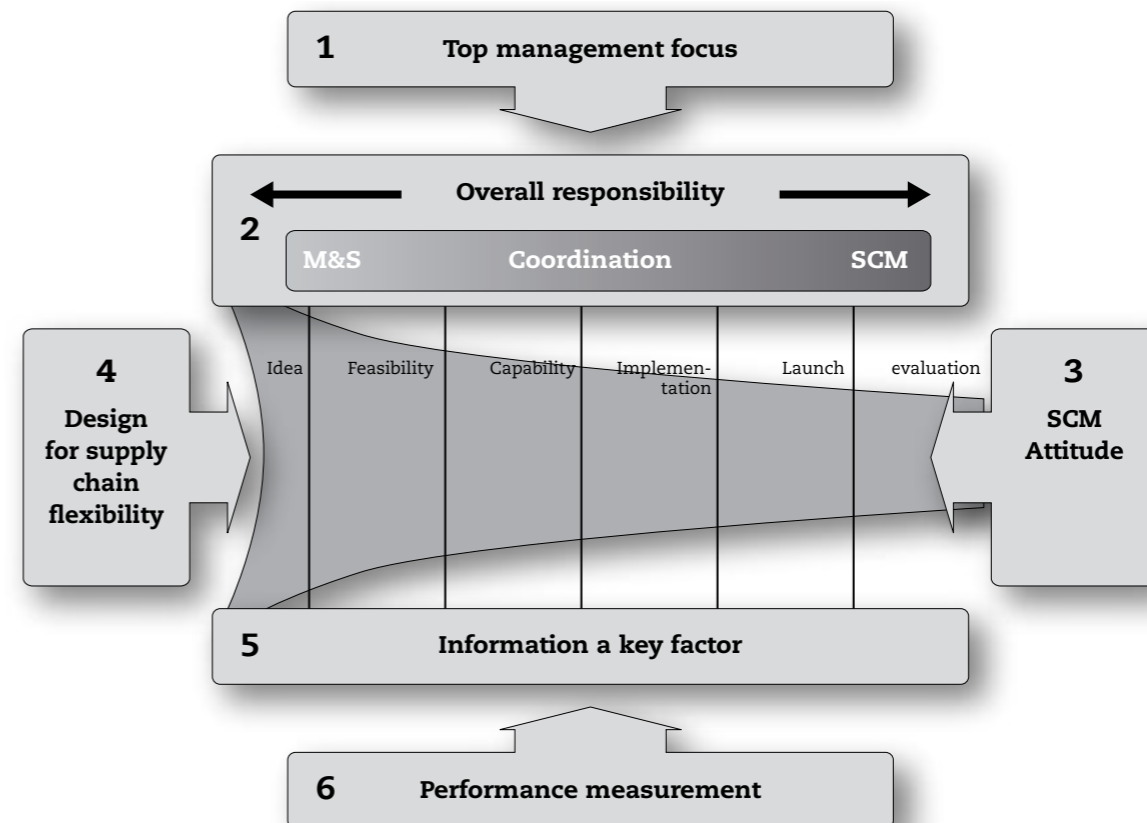


Figure 13 Six guiding principles for profitable new product introductions

Business management level. Next to this high level responsibility the operational coordination should be secured. In the first two stages (idea-feasibility), Sales & Marketing should be responsible, not only for creating proper initial data/information and making these accessible for the whole organization but also for coordinating the process. In the execution stages of the funnel (capability-implementation-launch) SCM should be responsible for coordinating the process by following up on all tasks defined for all functions, gathering relevant master data and making these accessible in both the project management tool and in the ERP system.

3. Show SCM attitude: selling added value

Supply chain management should play a more important role in NPI processes, to anticipate the new products and to be able to gather e.g. initial demand information. Often SCM is responsible for maintaining relevant operational data in ERP systems. Early involvement results in improved data availability throughout the organization, enabling more accurate decision-taking during the process. By involving SCM transition management (taking adequate care of phase-in and phase-out) will be an integral part of the NPI process.

A pro-active role of supply chain management is required, which – in some cases – needs an attitude change of the people involved. Supply chain management needs to ‘sell’ its added value internally. Some areas in which supply chain management clearly adds value are:

- risk assessment
- contingency and what-if scenario planning
- effective transition management
- suppliers selection
- make/buy decision (outsourcing)
- keeping cost price within agreed limits

4. Design for supply chain flexibility

In the very early stages of the innovation process the supply chain limitations and possibilities should be taken into account. Real new product sales will always be different than the forecast.

A flexible supply chain is vital. If Marketing & Sales decides to bring additional media

exposure, time-to-volume might get critical. If the process is delayed, production capacity should be flexible enough to reschedule first production batches. This can for example be accomplished by paying a fee to a subcontractor to reserve capacity which can be utilized if needed. If new products can be produced using the same equipment as already existing products, the risk of obsolete equipment is minimized in case the new product is not successful. Also by choosing the right suppliers who can adapt to changing conditions flexibility can be reached. Forecasting information can be translated into worst-case, best-case, and most-likely scenarios to install the right flexibility.

5. Make information a key factor

Accurate and up-to-date master data is the backbone of effective decision making. In the preliminary stages the uncertainty factor is large, but should be reduced (as much as possible) toward the launch of a new product. Make sure information is consistent, timely, and correct and make it available throughout the organization. SCM should play the leading role in this field.

6. Introduce NPI performance management: make it measurable

The success of an innovation process is not only measured by the additional sales it generates. The process itself towards the new products launch is just as important. Performance management should be executed throughout the total innovation process. Therefore appropriate KPIs and decision support tools are needed to manage the process and keep track of possible issues in the process. Especially in companies where multiple new product projects run simultaneously, it is critical to have common KPIs. Questions like ‘does a specific NPI process need more resources’ or ‘what are the consequences of this introduction delay for my production capacity’ can only be addressed if processes are measured and managed.

‘These guiding principles will help to provide companies in the Food & FMCG industry with a well-stocked survival kit of profitable new product introductions’

References

Vriens, Versteijnen [2006]. Planning and Forecasting in the Food Industry.

ACNielsen [Summer 2006]. CONSUMER Insights today for tomorrow’s decisions,

ACNielsen [2005]. The Power of Private Label

Aberdeen, [June 2004]. Product Development in the Consumer Industries Benchmark Study.

Robert G. Cooper [2001]. Winning at New Products: Accelerating the Process from Idea to Launch (Cambridge, MA: Perseus Books, 2001, 3rd edition)

Arthur D. Little [2005]. Innovation Excellence Research

Kregting [2006]. Food Personality, 2006

About EyeOn

In 100 days EyeOn delivers structural improvements in speed, efficiency, and output reliability of planning processes. EyeOn is a consulting firm specialized in designing and implementing planning solutions in complex organizations.

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About the knowledge network

The Food knowledge network specifically focuses on the Food (& FMCG) industry and the planning and forecasting issues that are characteristic for this industry. The food supply chain is facing numerous challenges and changes impacting the total value chain. The influence of the retail 'price-war' and the need for shorter cycle times are just a few examples. The objective of the network is to share experiences and best practices in how supply chain management and business planning can deal with these challenges. The network is an excellent opportunity

for networking between peers in the Food industry, for instance by semi-annual Round Table sessions organized by EyeOn.

At present the participating network members are: Aviko, BASF, Bavaria, Coca Cola, Diageo, DSM, Friesland Foods, Grolsch, Heineken, Heinz, Hero, IFF, IMKO Nut, IOI Loders Croklaan, Klöckner Pentaplast, LU/Danone, Masterfoods/Mars, Perfetti van Melle, Purac, Quest, RPC Packaging, Sara Lee/DE, Suiker Unie/Cosun, Tetrapak, Uniekaas, Unilever, Vion Food Group, Vrumona and Zwanenberg.