

Future R&D Strategies in Food & Drinks: Evolution From Orthodox Approaches to Open Innovation Models

R&D is a key driver of sales growth in the consumer products industry, but returns from investments in R&D and innovation have been falling. This report provides a review and assessment of the strategic innovation options that consumer products companies should examine. It also covers the need to develop a coherent innovation strategy across categories and platforms, aligned with overall corporate strategy.

Scope

- Failings with current consumer products R&D approaches and how these are holding back innovation.
- Various types of innovation approaches and the keys to unlocking their potential.
- Open innovation and its potential benefits for the consumer products industry.
- Industry opinion survey and current thinking with respect to various innovation topics.
- Case studies of leading innovators.

Research and analysis highlights

CPG industry invests relatively little in R&D compared to many other industries. This is despite breakthrough innovations offering higher returns. Breakthrough innovations accounted for just 1.5% of all product launches over the last three years.

Changing innovation environment is creating many challenges to innovation. One major change is the incoming Health Claims Regulation in Europe which will both increase the cost of healthy product innovation and challenge current innovation practices.

Consumers can increasingly be brought into the innovation process through innovative research approaches and the use of Web 2.0 technologies. This can have major benefits in terms of providing fresh ideas into product innovation.

Key reasons to purchase this research

- Evaluate strategic options available to a CPG company in order to start the processes of deciding an updated innovation strategy for growth

- Understand the crucial actions and approaches required in order to execute strategic decisions effectively
- Identify flaws in current innovation practices and understand why these are holding back product innovation.
- Learn how innovation strategy needs to be linked to corporate strategy in order to ensure that all part of the R&D operation are focused
- Implement best practice approaches into your own business by learning from the leading innovators

Table of Contents

Future R&D Strategies in Food & Drinks	
Executive summary	12
The need to reassess R&D	12
Improving R&D strategy	13
Food and drinks: Performance and innovation practices	14
Case studies	15
Chapter 1 The need to reassess R&D	18
Summary	18
Historic R&D approaches are failing	19
Innovation is the “backbone” of a FMCG company	19
Innovation during a recession is vital	19
R&D budgets in FMCG companies have been cut	20
There is a downward spiral in innovation budgets	20
R&D and general innovation face numerous other challenges	21
Ingrained approaches are holding back FMCG innovation	21
“Fast following” is an easier route	22
Selecting an R&D strategy and approach is complex	22
Innovation should vary on a category by category basis	23
Variation should not cancel out an overall strategy	24
New challenges to current R&D practices	25
Product lifecycle management issues	25
Product lifecycle management in practice	25
Time to market for new products is shrinking	25
New innovation strategies and processes	26
Adoption of open innovation is in its infancy, especially for smaller companies	26
The food sector is leading in the adoption of open innovation	27
Health claims regulation	27
Accounting for regulation will become embedded in the innovation process	27
R&D operations can learn from the pharmaceutical industry	27
Health claims regulation will increase the cost of “healthy” innovations	28
Consumer uptake of new products	28
Uptake of new products is currently decreasing, at least in the US	28
Flaws in current R&D approaches	29
A failure to meet consumers’ needs effectively	29
Extreme cost reduction in R&D	30
British food and drinks producers are low R&D investors	30
A similar pattern applies to the FMCG industry globally	32
R&D processes and organizational structures	33
The lack effective processes and team structures	33
Conclusions and outlook	33
Chapter 2 Improving R&D strategy	36
Summary	36
The need to define innovation strategy	37
Defining basic innovation strategy is often overlooked	37
Deciding on the type of innovation	37
Breakthrough innovations sell better	37

Most FMCG companies do not actively pursue breakthroughs 39
Open or “closed” innovation? 39
Open innovation is much more than being open to the idea 39
The danger of over-relying on open innovation 40
Open innovation can tangibly improve R&D 41
Defining open innovation 41
Using inflows and outflows of knowledge to accelerate innovation 41
Open innovation replaces “hub and spoke” innovation structures 41
New structures can result in new business approaches 42
The benefits of open innovation 43
Case study 1: Using open innovation to create major new products 43
Open Innovation: collaboration 44
Collaboration with retailers can be highly successful 44
The rationale is clear, but uptake has been slow 44
Collaboration should focus on specific opportunities 44
Relationships and structures must allow effective working practices 45
Supplier collaboration is also important 46
Kraft’s supplier approach highlights how practices can be enhanced 46
Open innovation: consumer-led approaches 47
What are consumer-led approaches? 47
Consumer-led approaches are not the same as using consumer research 47
Types of consumer involvement 48
Effectively utilizing consumer-led approaches 48
Making consumer-led involvement a reality is possible 48
Consumer-led approaches and supply chain challenges 49
Smaller volumes and SKU proliferation are obstacles to overcome 49
Second supply chains for consumer-created products are realistic 49
Benefits of consumer-led innovation 50
Making new innovation processes work 51
The basics: Strategy alignment and engaging employees 51
Becoming the partner of choice for open innovation 51
Being the preferred partner is a powerful position to be in 51
Structural improvements 52
Removing “roadblocks” is key, but they vary with company size 52
Cross-functional teams are fundamental to success 53
Procedural improvements and decreasing time-to-launch 53
Re-examining stage-gating to make decisions more effective 53
Enhancing information, especially by “hyper-communicating” 54
Product innovation as a part of overall product lifecycle management 54
Using old techniques, like “teardowns” more effectively 55
Improving and consistently using innovation metrics 56
Adopting strategic pipeline management 57
Coordination of activities is crucial 57
Other strategic options 59
“Buying in” innovation 59
Numerous other options bolster improvements 59
Outsourcing innovation processes 60
Outsourcing part process is not the same as “open innovation” 60
Conclusions 61
There is a gap between views and how companies approach innovation 61

Chapter 3 Food and drinks: performance and innovation practices	64
Summary	64
Introduction	65
R & D and FMCG company performance	65
The link between R&D and performance	65
A complex relationship between R&D investment and sales growth	66
Food and drinks: R&D strategy and approach	68
Drivers of R&D	68
Focusing on competitive pressures could diminish breakthrough innovations	68
Natural products and ingredients are vital	69
Substantiated health claims will be an important product feature	70
Sources of innovation	71
Most companies still carry out the majority of innovation work inhouse	71
Outsourcing is about accessing expertise, not about cutting costs	73
Structures	74
Regional structures are regarded as offering the best returns	74
Regions	75
Asia-Pacific will become an important innovation hub	75
Food and drinks: Product launch analysis	76
The number of true “innovations”	77
There are very few breakthroughs despite their importance	77
Innovative formulations account for the majority of product breakthroughs	77
By region	78
New product launch patterns challenge views about regions’ innovativeness	78
By company	79
Some companies have maintained launch activity, while others have cut back	79
By claim	80
A clear focus on health	80
Conclusions	82
Companies that have cut innovation need to have launched fewer, better, products	82
Chapter 4 Case studies	84
Summary	84
Introduction	85
Case study 2: P&G is FMCG’s leader in open innovation	86
Origins of P&G’s approach	86
Setting the agenda for open innovation	87
Using innovation networks effectively	88
P&G uses several proprietary networks	88
Open networks are also important	89
Results of the program	90
Making it work: Key factors	90
Fast, rigorous screening is a major factor for success	90
Sharing risks and rewards is vital in becoming the “partner of choice”	91
Product example: Pringle’s Prints	91
Time-to-market and cost were reduced by using an open innovation approach	91
Case study 3: General Mills’ smoothing processes	92
Origins of G-WIN	92
General Mills has focused on facilitating connections	92
G-WIN processes are linked to its innovation strategy	93
Setting the agenda for innovation	94

Unmet consumer needs provide the foundation 94
Enabling connected innovation 94
Structuring to achieve connected innovation 94
Simplifying the process of articulating needs 95
Results of the program 95
Product example: Progresso Light Soup 96
One of the main insights came from the yogurt division 96
Case study 4: Kraft's renewed focus on innovation 98
Origins of open innovation at Kraft 98
Approach to open innovation 99
A cultural change was required 99
Business processes have been updated 99
New tools have been developed to aid innovation efforts 100
Product example: Bagel-fuls 101
Case study 5: Danone's focus on "blockbusters" 103
Origins of Danone's approach 103
Danone's "blockbuster" approach is reflected in its structures and processes 103
Structuring to nurture breakthrough innovations 104
Structural changes have led to a greater focus on breakthroughs 104
Supplier collaboration is selective 105
Danone altered its procurement operations 105
Making it work: Key factors 106
Research practices fit with wider operations and strategies 106
Case study 6: DSM is an outstanding innovator 106
Origins of DSM's approach 106
DSM began with an ambitious plan to become "intrinsically innovative" 106
R&D budgets were also increased 107
Setting the agenda for open innovation 107
Trends form the starting point for innovation processes and thinking 107
Results of the program 108
DSM achieved results quickly 108
The focus on tracking innovation makes the process more manageable 108
Making it work: Key factors 109
Improved structures and processes were fundamental building blocks of success 109
Regular sanity-checks (stage-gates) are employed 109
DSM ensured it opened up its innovation practices 110
Developing new tools to aid innovation processes has been very important 111
Product examples 112
Innovations in nutrition and personal care 112
Chapter 5 Future outlook 114
A re-focus on innovation efforts 114
Innovation approaches will come under greater scrutiny 114
Innovators will have competitive advantage 115
Maintaining innovation will be a winning strategy 115
Characteristics of success will emerge 115
The best innovators will share common characteristics 115
Best practices will be adapted 116
Leaders will adapt the "best in class" innovation practices 116
Chapter 6 Appendix 118
Primary research methodology 118

Product Launch Analysis	118
Industry opinion survey	118
Index	122
References	123
List of Figures	
Figure 1.1: R&D expenditure as a proportion of sales by sector in the leading 850 UK companies with R&D activities, 2003-2007	31
Figure 1.2: Global R&D expenditure as a percentage of sales by sector, 2008	32
Figure 2.3: Importance of different types of innovation for food and drinks NPD both now and in the next five years	38
Figure 2.4: Example schematic of a “hub and spoke” and a fully connected open innovation approach	42
Figure 2.5: NIKEiD: An example of consumers designing their own products	50
Figure 2.6: A framework for the strategic management of product development pipelines	59
Figure 2.7: Industry opinion survey: Importance of sources of innovation	60
Figure 3.8: Four year growth in R&D investment against four year growth in sales for global food, beverage and personal goods companies, 2003/04 – 2007/08	67
Figure 3.9: Industry Opinion Survey: Importance of business environment factors as drivers of R&D expenditure in the next five years	69
Figure 3.10: Industry opinion survey: Importance of product types and ingredients as drivers of R&D expenditure in the next five years	70
Figure 3.11: Industry opinion survey: Importance of product features as drivers of R&D expenditure in the last and next five years	71
Figure 3.12: Industry opinion survey: Where does the majority of innovation take place within your company?	72
Figure 3.13: Industry opinion survey: Importance of various sources of innovation	73
Figure 3.14: Industry opinion survey: Opinions about various statements about outsourcing R&D	74
Figure 3.15: Industry opinion survey: Which structures offer the greatest return on investment on R&D expenditure?	75
Figure 3.16: Industry opinion survey: Innovation ratings of regions now and in five years time	76
Figure 3.17: Share of breakthrough food and drinks innovations by innovation type, 2007 - 2009	78
Figure 3.18: Share of global food and drinks product launches, by region, 2007-2009	79
Figure 3.19: Number of new food and drinks product launches by leading companies, 2007-2009	80
Figure 3.20: Heat Grid Analysis: Share of claims made by leading manufacturers for their own products, by claim type, 2007-2009	81
Figure 4.21: Kraft’s alliance framework for open innovation	100
List of Tables	
Table 1.1: R&D value and growth (%); sales and profits growth (%), 2006-2007	31
Table 6.2: To what extent do you agree/disagree with the following statements in regard to outsourcing R&D?	119
Table 6.3: Rank in order which region will be the most innovative in R&D in the food and drinks industry in the next five years?	119
Table 6.4: Rate which R&D organizational structure you believe offers the highest return on investment (ROI)?	120

Table 6.5: Rate how important each of the following are as a source of innovation?
120

Table 6.6: Rate how important the following have been as drivers of R&D
expenditure in the last five years? 120

Table 6.7: Major food and drinks manufacturers R&D spend (\$m), 2005-2009 121