

CONSUMER LED MARKET ANALYTICS - A NOVEL METHOD FOR INNOVATION LANDSCAPING OF REMOTE MARKETS

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Introduction

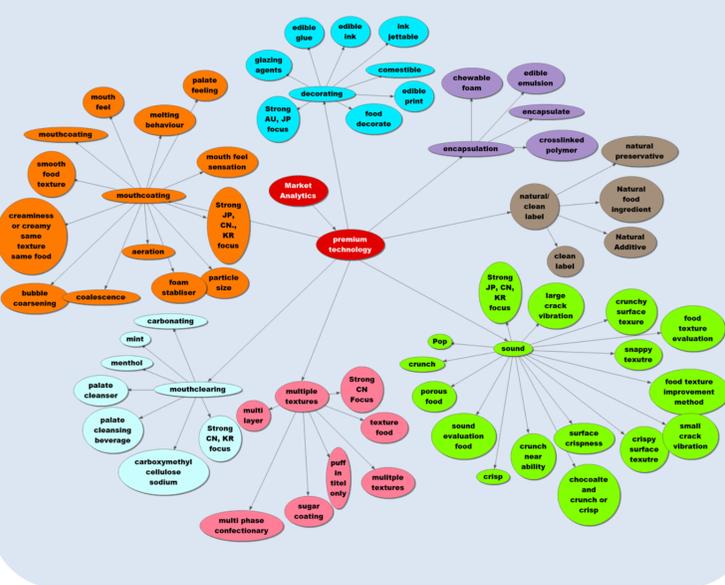
Patent analytics have traditionally been used by industry to source information relating to compliance, emerging technology development, competitor activity and R&D investment. It was hypothesised that patent data could also reveal innovation trends in response to consumer needs in remote markets. To test this hypothesis, a case study has been prepared combining in-market consumer research on the attributes of “premium” food products with an analysis of Chinese patent activity. The resulting case study reported herein, focusses on premium dairy innovation in China.

Conclusion

Preparation of this case study demonstrated the effectiveness of the consumer led patent searching methodology. Using this novel method to search Chinese patent data resulted in the identification of several innovation opportunity areas. The method allows premium enabling patents to bubble to the surface whilst maintaining a broad view of the dairy innovation patent landscape for China. A subsequent validation exercise conducted using traditional patent classification searching coupled with technology key words was found to have a reduced hit rate for premium enabling patents resulting in less opportunity for the discovery of unexpected premium innovations.

Method

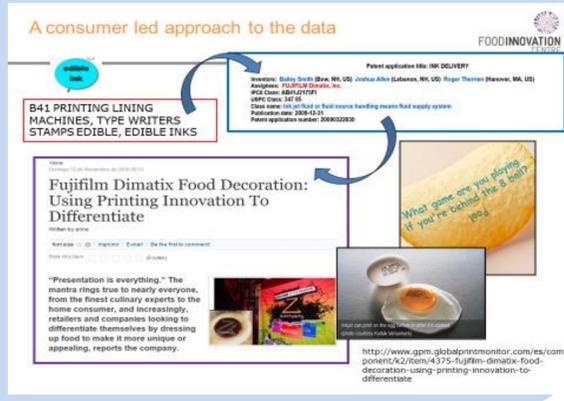
In market consumer research capturing Premium food attributes as defined by the consumer



Incorporation of searching filters based on consumer feedback and combined with enabling technologies

Country	Count appln or grant date > '1999-12-31'	Title Coverage (%)	Abstract Coverage (%)	IPC Coverage (%)
Australia	717,063	95	21	92
China	7,276,562	90	90	99
Indonesia	27,134	100*	76*	100
Japan	6,396,693	81	77	92
Malaysia	20,756^	100	89	100
South Korea	2,348,407	91	62	96
Philippines	33,920	100	37	100

Development of ASEAN patent database



Category specific search conducted (Dairy in China)

Search results were then used to map out consumer benefits per innovation patent and subsequently to generate an innovation landscape for Chinese dairy.

Full case study report can be found at www.foodvaluechain.unimelb.edu.au on resource / publications.

Results

Dairy innovation themes in China

Relevant premium patents were classified by category (cheese, milk, yoghurt and ice cream) and the major innovation themes found ranged from Taste – Health – Wellbeing – Beauty

Function	Taste	Health	Wellbeing	Beauty
Ice Cream	Novel Flavours TCM Ingredient	Added Vit A & D, Ca	Whey Protein	
Milk	Fermented Added Sweetener Texture Change Watermelon Juice and Milk Juice and Milk	Added Ingredients for hypoglycaemia Vegetable powder and Milk	3 types of vegetable protein bases Milk +pseudo-ginseng +proanthocyanidins for tonifying yang & resisting fatigue	Bacteria species + ceramide / collagen Tablets for beauty
Yogurt	Extract Flavour	Added ingredients for diabetes Added ingredients for cardiovascular health	Yoghurt + legumes for qi and balance	
Cheese	Part of soy sauce shelf stable china cheese Part of soup mix soybean plus cheese			Disruptive

Example Innovation Opportunities

Flavour formulations for milk based beverages differed widely from the from traditional strawberry, chocolate, and banana varieties found on the Australian supermarket shelf. Fruit juice and milk combinations coupled with carbonation or filtration processes to make milk more translucent/thinner were common. Flavourings for ice-cream included carrot, sesame, black tea and traditional Chinese fruit/ vegetables.

Functional Products included a wide range of innovations with a number of patents related to the addition of vegetable proteins into milk bases. Complex combinations of traditional Chinese Medicines were incorporated into a number of wellbeing type products for balancing 'Qi' and tonifying Yang. There were also additives with specific health claims for heart health, diabetes and digestive health. Fermented whey based beverages were also a new area for consideration by the Australian market, manufacture of these beverages may be an opportunity to value add to existing whey waste streams.

Beauty was another new innovation space, Formulation patents included a milk base enriched with collagen and ceramide, while other patents included beauty claims for specific bacterial strains e.g. Streptococcus thermophiles. Chinese beauty product formats included beverages and tablets (image is a daily milk beverage enriched with 5500mg hydrolysed marine collagen and L-Arginine, Polysaccharide of Silver Ear mushroom (Tremella fuciformis), essential vitamins, C, A, E, B complex and D3).

