Two factors drove the initiation of this project. First, the team had identified “a total of four technologies in use across the organization” in other regions. Second, the marketing team identified a possible market opportunity for a new type of product which would compete in the premium, more “natural’ crisps sector of the snack foods market” [BB24]. Hence the recognition of the opportunity for a new product and brand to compete within a growing sector, alongside brands such as Kettle Chips, which were well established in the market place. Whilst this opportunity had existed for some time, these technologies were now considered well enough established for the division to understand and evaluate their potential.

The next step was to undertake market research into each of these proven technologies in the UK. This was conducted using focus groups with mixed cohorts, watched by researchers through two-way mirrors. These were used to identify whether consumers found anything interesting in the product concepts, their level of interest, and reaction. The testing identified the greatest level of interest in one product, which was selected to research further. This product forms the main focus of the case. The product was initially identified in a technology sharing session, having been developed and launched in the Australian market two years earlier. The UK team had monitored it for two years after launch, before initiating this project to evaluate it against other technologies. The team’s observations provided useful background knowledge.

The selected product’s key points of differentiation were based on the following:

- Existing premium ‘natural’ style crisps were cut in bulk, then put into large vats of oil, where personnel would separate them manually whilst cooking. Placing the crisps in the oil resulted in a drop in temperature, which was hard to control. When cooked, they were eventually removed from the vat.

- By contrast, the proposed new product involved the potato chips being sliced directly into the fryer, and moved along a conveyor style fryer into different ‘zones’, varying in temperature. This simulated the normal frying process (where heat would start high, drop, then rise again), but also controlled the temperature change more precisely and kept the chips separate. This was considered to create a superior end product.
Having chosen the concept, and established the likely market reaction and consumer interest, the team moved towards stage two. This involved preparing the business analysis and justification. At this point, the packaging team became directly involved.

The packaging team needed to provide a proposal on the type of packaging to be used. This information could then be incorporated into the product proposal in the next stage. The team proposed a ‘pillow’ style of pack, common within the market, and similar to those used on the firm’s other products. In their initial meeting with the project manager, the team outlined that whilst other options were possible, these were not practical due to unit and capital equipment cost implications.

The team’s recommendations were based on their prior experience, research, and investigations with suppliers. “Prior investigations have revealed significant cost implications associated with even relatively minor changes…. Consumers just aren’t willing to pay the extra” [BB21]. This head of packaging outlined the company’s predicament when trying to move to other formats. “…These would typically involve a large premium, particularly as over the past 20 years, the company has worked with some of the industry’s best ‘baggers’, and done some deals to get great prices from these packaging firms. The flip side of this was that effectively it leaves us stuck in a corner, having become very committed and tied into the packaging format”.

Hence, close supplier relationships were both “both good and bad for the company” [BB21]. This situation was further compounded by the fact that other packaging options were “not sufficiently valued by consumers to warrant the additional price increases” associated [BB21]. Thus changes were limited primarily to substrate choices and basic graphical changes.

At this meeting, in order to illustrate why this was their recommendation, the team contrasted this to the idea of using biodegradable PLA (addressed in section 8.5.6). The decision was reached to use the standard pillow format, but with some potential material variations (such as a paper layer or material variation, in order to appear more natural). The packaging team believed that this would benefit consumer perceptions, and were aware that other companies used similar types of bags. This relatively low level of change also meant there was little need to undertake detailed evaluations of the packaging format, or consider its implications on the product’s display and distribution. The decision would also be acceptable to the division’s
buyers, who “…were a key stakeholder… [and] frequently influence decision making, to keep costs to a minimum” [BB24]. No supplier contact was required at this stage, as the basic materials variations had been discussed in prior meetings.

The final justification, delivered at stage two, provided an outline of:

- The proposed product and pack
- The level of consumer interest
- Supporting data from the marketing department
- An estimate of both investments and a profit and loss statement

The ‘justification’ document was put together by the core NPD team then reviewed by senior management. Approval was given to continue the project. The new technology, and its perceived superiority, was critical to the project’s approval.

The third stage involved undertaking further consumer testing and analysis, consisting of three phases. First, initial tests of product samples were undertaken with consumers: to obtain their feedback, establish interest levels, and fine tune recipes. This was performed alongside specialist design agencies. The phase culminated in consumers being asked to indicate, on scales, how much they liked the product and their level of preference over a competing product.

The second phase was referred to as a “central location test” [BB24]. This consisted of employees visiting a shopping centre, where they would approach consumers and ask them to participate in brief product testing. 200 volunteers were asked to try three product samples, one of which was different, while the other two were the same. This would reveal how commonly consumers recognised a product difference. The result was positive, with consumers regularly identifying the different product.

The final phase involved a full analysis of the results. This consisted of three types of evaluation:

- First, ‘hedonic’ testing, which examined how consumers responded to the product in terms of their level of preference.
- Second, preference testing, in which their level of preference was compared with the main competing product.
• Finally, significance testing, focused on the results of the central location test, which examined the number of consumers who identified the product as different.

The combined results led to a decision to take the product to the next main stage of the process.

At the end of the third stage, the packaging team revisited their earlier proposal. The material/substrate choices were given more specific consideration, establishing their cost and whether they could practically be used to pack the product. The packaging team worked alongside buyers, to contact and enter into discussions with existing packaging suppliers. These discussions confirmed that they would use a standard pillow style pack, incorporating an outer paper layer. Such a relatively small change would carry low levels of risk, add little additional cost, and have minimal impact on the production line. Moreover, it would have the benefit of being “more biodegradable... [and] associated with being more environmentally friendly in the eyes of the consumer” [BB24]. The addition of the paper layer was also seen environmentally as a “first step in the right direction” for snack food packaging.

The fourth stage was that of final testing and evaluation. This was the final part of the process, focused on evaluating the product’s potential. The product would then be implemented, and proceed to planning for manufacture and investing in the required machinery. The stage largely consisted of two testing processes, to more fully establish the likely product sales and success, followed by two phases of evaluation. Testing at this stage was undertaken with two key stakeholder groups.

The first test focused on examining consumer reaction to, and gathering feedback on, the product, its price, features, branding, and the proposed packaging. The tests also measured purchase intent. This involved the comparison of a number of proposed volumes which could be offered for sale, and possible prices of each (to establish price volume trade-offs). This enabled the optimal combination of price and quantity to be established. In addition, consumers were asked to state their purchase intent on a ten-point scale. The tests also enabled any final consumer insights, options, and reviews to be gathered.

A design agency also investigated consumer perceptions of the product, which would subsequently be fed into the product’s branding, with the graphics used on the
packaging. This was the first stage at which the design agency incorporated packaging into their activities: with their focus on the graphics. The second type of testing was undertaken concurrently by the sales team, who held discussions with retailers in order to establish their probability of stocking it, how many they would be likely to stock, and in what stores they would stock it.

The results of the two tests were then evaluated, in order to establish the products potential. This was done by combining the data on the purchase intent of consumers with the volumes which retailers were likely to stock, as well as the demographics of those stores they were likely to be stocked in. Based on the results, the team decided to proceed to the final financial evaluation phase. Calculations were made on the required investment: in particular, in terms of sites, space required, environmental implications, logistics, and skill fit. Whilst a decision to proceed had largely been taken after the previous phase, the result of this stage was a final decision to produce and launch the product.

The fifth stage involved planning for manufacture, testing, and implementation. This began with the planning for full scale manufacturing, which involved supply tendering for capital appropriation, materials requirements calculations, depreciation, and other related considerations. Once planning was complete, the project moved into two commissioning phases:

- The first focused on engineering, which involved building the plant machinery and assembly, as well as joining and welding.
- The second was product commissioning, which involved the newly built plant being cleaned, then micro-tested, to ensure there were no contaminants. This guaranteed the standards of the plant, and protected against any possible issues.

During the second commissioning phase, packaging began to be considered to a greater extent. The packaging team worked alongside buyers, focusing on the choice of packaging substrates, or materials. At this point, a number of specialist bag suppliers were contacted and involved in the project in order to provide proposals and costings, based on the established planned format. The relative benefits and potential problems with each of the substrates were evaluated (specific materials). Buyers had a large role in evaluating the costs of material changes, with the aim of keeping any increases to a minimum level. At the same time, a separate design
agency focused on packaging design and artwork, and the testing of the proposed name and graphics. This design process took a total of sixteen weeks.

The sixth stage focused on business justification, and involved generating estimates of the investments required for the product launch, and the period immediately following this. The marketing team took the lead of this phase, inputting the marketing plan and likely demand. This business justification was now also able to incorporate detail on packaging costs and materials.

Stage seven, factory preparation, involved cleaning the factory to food standards, and preparing it to receive ingredients and begin production. The factory was then signed off and passed to operations, and only food grade materials were allowed into the factory unit. Concurrently, contracts were signed with the selected food and packaging suppliers. In the case of the packaging, an existing supplier who had provided the lowest cost price (for the desired type of packaging) was selected. The second phase within this stage involved the operations staff ensuring the machinery ran well and could produce the goods, allowing production to commence.

The eighth stage was that of service to sales point and stock building, in order to begin distribution. At this point, supplies were also built up in warehouses, and the company began distribution to retailers. Once stocks had been built up, and the product delivered, it began to go on sale over the following few weeks.

The full launch and marketing communications, stage nine, was not initiated until eight weeks after full supply to retailers. This period allowed the team to ensure that no issues had occurred which would prevent consumers from finding the product on the shelves: thereby avoiding possible dissatisfaction and lost sales.

8.5.4 Project L: Product Line Extension- Limited Edition ‘Flavour Cup’ Crisps

Project L examines the development of a new, limited edition line of crisps. This was an extremely common type of project, and involved a relatively simple development process: with low costs and low product change. The process largely focused on flavour and ingredients development, and small graphic design changes to the packaging. This is summarised in Figure 8.5.5, and expanded upon in Figure 8.5.6.
In this project, the focus was on flavours representing a number of nations, based on a current sporting event.