Pinnacle FOODS INC.

Case History – North American Food Producer (Frozen & Ambient)

The Business Challenge:

Pinnacle Foods had acquired and was continuing to acquire a range of brands and food production plants across the US and Canada. The business had, at its core, a range of well-known American consumer products:

Duncan Hines · vlasic · Mrs. Butterworth's · BIRDS EYE · BIRDS EYE Voila! · gardein
Van de Kamp's · LOG CABIN · Wish-Bone · Nalley · Pender's · Celeste
Mrs. Paul's · OPEN PIT · ARMOUR · C&W · HUNGRY-MAN · Aunt Jemima Frozen Breakfast
COMSTOCK WILDERNESS · Husman's · Snyder of Berlin · TIM'S CASCADE SNACKS · Erin's · HAWAIIAN
BERNSTEIN'S · SMART BALANCE · earth balance · udi's Gluten Free · glutino · evol.

The business had a wide range of manufacturing capabilities, some old, some new; with an equally diverse range of packaging technologies. The supply chain, for getting products to customers, was centralized as each brand was acquired. But each product / SKU range came with pre-existing plant constraints and packaging / palletization performance decisions baked in. Our task, at James Ross Consulting, was to develop a methodology that would allow us to harmonize supply chain performance. Once the methodology was in place, our task was then to develop ways in which the business could identify constraints and capabilities within the supply chain (end-to-end), to create an aligned test methodology, that would be effective for ambient and frozen foods across all Pinnacle, Boulder and Gardein routes to market. Finally, to run the programs and trials, site by site, network by network, to deliver the change and to establish new, more harmonized and consistent ways of working for all new products.

STEP ONE - The Methodology:

We used our proprietary software platform (PDP) to provide a chassis upon which we could build a program for change. PDP enables us to map all SKU's in the client's mainframe data network and to identify quickly all SKU's which are sub-optimal for the E2E supply chain. To build the chassis for the tool to work, we firstly mapped the capabilities and constraints of the Pinnacle Foods DC network – rack heights, handling methods, cost allocation processes. We considered as part of this, the current mix of full pallets v layers v case pick products sent out to customers, to ensure we created solutions which would deliver a net-business benefit.

We tracked routes to market – from point of production to the first receiving DC. This was used to build a model for comparison of options in the supply chain – what happens if we change pallet heights, what happens if we double stack instead of single stack etc. For this element we considered standard road freight and intermodal transport (long distance, coast to coast). Each route had a lane rate allocated, to allow us to build and model costs.

We visited the core production sites (though, in Covid times we can also do this element remotely). Site visits were an opportunity to engage with the client site team and to review first-hand the end of line equipment, capabilities, conditions, ergonomics, flow and potential for change relating to packing into secondary packaging, through to loading onto the truck for dispatch.

Once this data was complete, we loaded the key fields into the PDP tool and ran our initial evaluation. The tool quickly identified the potential 'size of the prize', if we could bring all pallets / truck loading efficiency targets up to a consistent level. It also indicated where we were likely to be constrained, giving each constraint a US$ value. This information then helped us prioritize the next steps. It also meant we were able to challenge some of the pre-existing network and capability constraints – if the savings figure is high and the cost of change low…

STEP TWO: Trials & Validation:

Once the priority list was created, the James Ross Consulting team began to work on delivery of 'quick win' programs. These were items where the required change to how a pallet was being loaded was simple and low risk. Typically, as simple as adding extra layers to a pallet or cases to a layer (or oftentimes, both).

We developed and agreed with the Pinnacle Packaging R&D Group, a test protocol for transit testing. We elected to use live trials rather than laboratory-based analysis because, as a logistics led project, we already had access to sites, to DC's and to inventory. Using existing inventory to ship over fixed routes / distances was quick and logical. It was also a much lower cost for running multiple trials (100+ transit trials) versus existing lab trials.

Trials were run and results evaluated – allowing us to calibrate the model and to begin to deliver year on year, direct cost (and sustainability) savings.

The program then ramped up to cover more trials and more SKU's.

Technical Challenges:

Whilst some trials were low risk (light weight products), others were more challenging to complete. Within the PDP tool we assessed risk, based on a combination of formulae looking at weight, board spec, case perimeter (McKee), distance, pallet stacking pattern (column, interlock etc.), use of perforations in cases, type of shipping route (frozen / ambient) and requirements for pallet floor / pyramid stacking – with summer / winter rules etc. We also considered potential impact of claw-picking.

For some packs, we moved to heavier board grades (cost being off-set by the savings in logistics). For others, we redesigned the case.

Within some plants there were issues with palletizers (we brought in engineers to fix) and loading dock equipment, or door heights. We also had specific problems with pre-existing crushing on one entire product range. For each challenge we developed a program to assess the problem, to develop a financially viable solution, to trial the solution and to then execute the appropriate validation trials. All of this work was managed by the James Ross Consulting team, but working hand-in-hand with R&D, to ensure we were aligned on quality and the correct ways of working.

Deliverables:

The project ran for around 12 months in total, extending each time a new business group was acquired / added. It delivered direct cost savings of around US$13MM annually. More importantly, it created a common set of technical and performance standards for all products running through the supply chain. A critical cost-avoidance benefit for new products. Furthermore, the program delivered a lower footprint supply chain solution for the client – more densely packed trucks, more efficiently loaded pallets means fewer trucks on the road and less DC space needed. All solid and empirical sustainability wins.

Testimonial:

"The JRC team did a superb job, taking a cross-category project from raw data through completion, with minimal use of our internal resources, yielding not only significant cost savings, but also addressing potential quality issues"

Jose A. Amarista – VP Margin Enhancement