

**KODAK: DESIGN OF A SUPPLY CHAIN FOR  
SPIN-OFF PRODUCTS**

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2002

## 1. INTRODUCTION

Kodak is one of the world's largest and oldest manufacturers of optical and imaging products, and one of the world's best-known brand names. Due to external market changes, Kodak found itself with excess manufacturing capacity in certain business areas. Kodak's Performance Optical Products Group turned to The Logistics Institute at Georgia Tech (TLI) for assistance in repurposing this capacity in support of new, "spin-off" products, and in designing an "ideal supply chain" to support the manufacture and distribution of these new products.

This effort requires reconfiguration of existing physical manufacturing resources. In addition, in designing and developing new supply chains to serve anticipated markets for these new products, Kodak expects to be able to reuse significant portions of existing supply chains. A challenge of the project is that the excess manufacturing capacity is located in the United States, but demand for the new products is expected to come predominantly from Asia (specifically Japan, Korea, and Taiwan).

Developing new products and markets can be extremely expensive. Kodak seeks an approach that will allow them to control the evolution of production and supply chain costs and commitments in such a way that growth in costs is not disproportionate to growth in demand. Basic elements of the approach include:

- Reusing and repurposing existing capital assets and expertise;
- Reusing elements of existing supply chains where possible;
- A measured, step-by-step strategy in which Kodak can increase production capacity and supply chain throughput as needed.

## 2. PROJECT PLAN

The project schedule is divided into three main stages. Stage I consists of project initiation and data collection activities. It begins with a site visit for the team to become acquainted, and review products and processes. In this phase, the team conducts a literature review, identifies appropriate benchmarks and performance measures, and collects initial data to document baseline performance. Stage II is devoted to supply chain modeling and design, identifying alternatives and areas of opportunity. In Stage III, the team evaluates the results of the first two stages, in order to make recommendations.

Anticipated project outcomes include:

- Recommendations for an ideal supply chain;

- The establishment of appropriate economic measures of supply chain performance over time;
- Possibly prototypes of tools for supply chain support.

The team has created a base case study, based on a deterministic model. Continuing efforts are focused on:

- Developing a robust optimization model to incorporate uncertainty in costs and demand;
- Developing a solution approach for the robust optimization model.

### 3. CONCLUSIONS

TLI's project is to assist Kodak in designing an “ideal” supply chain for spin-off products. Given the distance between manufacture and customer base, this will be an important element of Kodak's endeavor. Kodak believes that such an overall strategy — encompassing manufacturing and distribution — will give it a competitive advantage in entering new markets.

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