

## Internship: Feasibility study on service contracts

**Assignment type:** Graduation assignment

**Assignment duration:** 4 months

**Location:** Veghel

**Educational level:** Master (WO)

**Desired study:** Industrial Engineering, Management/Business administration / Econometrics

**Language:** Dutch and English

### Description of the assignment

Next to the initial supplying of systems, Vanderlande also facilitates the maintenance of systems by a.o. supplying spare part packages, and offering site based services by own personnel at airports. The availability of spare parts is important, since system downtime may have serious consequences. For example, downtime of a baggage handling system at an airport may lead to baggage that misses its flight, which leads to significant costs. Vanderlande often supplies an initial package of spare parts to the customer, delivered at installation of the system. Also, spare part inventories are replenished from time to time upon request of the customer. In case of baggage handling systems, this may be pretty infrequently because legal obligations to tender spare part packages (e.g., once every two or four years). This leads to high cycle inventory for fast moving parts.

The services that Vanderlande offers during the life cycle of their systems yield an important part of both the total revenues and the total profit. Vanderlande aims to extend its services business in the future. An option is to stop offering initial spare part packages at system installation, and to offer service contracts instead. Such a service contract could consist of delivering all the spare parts needed for preventive and corrective maintenance within a certain time frame, where the length of the time frame may depend upon customer requirements. Also, different time frames for different classes of spare parts may be offered, e.g. depending on the criticality of the parts for the functioning of the system. The price of the service contract should obviously depend upon the length of the time frame. Advantages for the customer could be that no investment in spare parts are required and costs become variable in the part usage. From a supply chain perspective, safety inventories could be decreased, since parts can be pooled over multiple customers by Vanderlande. Also, the cycle inventory could decrease for governmental customers who are legally obliged to tender spare part packages to replenish current inventories. The advantage of Vanderlande should be that the turnover and profit of services will increase, a.o. because customers will use more parts through the Vanderlande channel than currently (a considerable fraction of the parts are sourced by the customers from other suppliers, since these parts are generic).

### Your tasks / responsibilities

Your task is to conduct a feasibility study for the move from offering spare part packages to offering service contracts. Questions to be addressed are a.o.:

- What kind of service contracts should be offered to the customers, and which type and rough value of service levels do customers expect?
- What volume of services can be expected if Vanderlande moves to services contracts? This will also be an important parameter for sensitivity analysis.
- How can Vanderlande fulfill the customer expectations as agreed upon in service contracts, e.g.;
  - Rough network design: how many warehouses are needed where with which capacities? Should Vanderlande have own warehouses for this purpose in the first place, or is outsourcing a better option? What warehousing costs may Vanderlande expect?
  - What spare part inventory levels are required to meet the service levels, and how should these inventories be allocated over the various warehouses
  - What transportation flows can be expected, how should transportation of parts to the customer sites be arranged, and what are roughly the corresponding costs?
  - What are the costs of managing service contracts?
- What is the business case for moving to service contracts, and how does it depend on key assumptions (e.g. the service contract volume to be expected)?

**Your department**

The Spare Parts department is responsible for the marketing, procurement, planning and delivery of material handling spare parts with a Global scope. It is part of the business unit Life Cycle Services.

The Logistical Support team is responsible for the timely and cost effective delivery of material handling Spare Parts. The Sales Support team delivers daily support to the different Customer Centers of Vanderlande around the globe. The newest addition to the department is the team Product & Marketing which is responsible for the professionalization and improvement of customer satisfaction.

**Contact**

Do you recognize yourself in this challenging profile? And are you looking for a graduation project in an organisation that has been elected "Best Employer" for years in a row? Please fill out the application form and upload your resume and cover letter.

For more information, you can contact us by e-mail: [internship@vanderlande.com](mailto:internship@vanderlande.com).