

SLF-R Laid the Foundation for Twenty Years of Service Logistics Research

By 2005, the Service Logistics Forum (SLF) had already been bringing together companies, knowledge institutions and service logistics experts for almost a decade. During its meetings, members exchanged experiences and discussed practical challenges. Gradually, however, a shared ambition emerged: there had to be more than simply talking about service logistics. "It was interesting to discuss service logistics together," says Rommert Dekker. "But we wanted to take the next step. Not only sharing knowledge, but conducting research together as well."

Jan Willem Rustenburg, then working at consultancy firm Districon and actively involved in the SLF network, joined forces with SLF board member Ben Gräve and the SLF organization to create a framework for structural collaboration between industry and academia. The result was Service Logistics Forum Research, or simply SLF-R. More than twenty years later, Professors Rommert Dekker (Erasmus University Rotterdam), Matthieu van der Heijden (University of Twente) and Geert-Jan van Houtum (Eindhoven University of Technology) look back on a project that ultimately reached far beyond its original research objectives.

Driving force

According to the three professors, Rustenburg was indeed the driving force behind the initiative. Van Houtum explains: "Jan Willem approached companies, built support for the idea and helped turn the research programme into reality."

The SLF-R business plan was published in 2005. Fourteen companies committed themselves to the programme and jointly funded half of the research costs, while the three participating universities contributed the other half. This enabled the appointment of three PhD researchers: one in Rotterdam, one in Eindhoven and one in Twente.



A crucial network

Looking back, Van Houtum considers it an innovative model. "Companies collectively funded part of the research and the universities covered the rest. Today, you see this model much more often, but at the time it was quite groundbreaking. In many ways, SLF-R was a precursor to the public-private research projects that later emerged through TKI Dinalog."

The collaboration was built upon the existing SLF network, which proved essential to its success. "Without SLF, this would never have happened," says Van Houtum. "All participating companies were already active within the forum." That network provided a strong foundation of trust,

allowing researchers and companies to work closely together on practice-oriented challenges.

Three universities, three research streams

Within SLF-R, each university focused on its own research theme, always linked to real-world service logistics challenges.

Erasmus University Rotterdam: Forecasting spare parts demand

Erasmus University focused on demand forecasting for spare parts. Researchers investigated how organizations could better align inventory levels with the geographical distribution of equipment and customers. "We really helped put install-base forecasting on the map," says Dekker. "When aircraft, machines or computer systems move, demand for spare parts moves with them. You do not want to wait until demand arises; you want to know in advance where inventory is needed."

Eindhoven University of Technology: Designing service networks

Eindhoven University of Technology concentrated on the design and configuration of service networks. Research topics included inventory locations, repair strategies, tool availability and the global distribution of spare parts. Van Houtum explains: "Companies such as Philips Healthcare operated global service networks for medical equipment in hospitals. That raises questions such as: where should inventory be positioned, which parts should be repaired, and for which failed parts should new components be purchased? We examined exactly those strategic and tactical decisions."

University of Twente: Service contracts and logistics performance

The University of Twente investigated the relationship between service contracts and logistics performance. The central question was how companies could offer different service levels

without incurring unnecessary costs. "Customers pay different prices for different service contracts," says Van der Heijden. "Your logistics operation must therefore distinguish between a standard contract and a premium contract. Otherwise, you end up providing everyone with the same level of service at unnecessarily high costs."

Direct impact in practice

In addition to PhD research, graduation projects formed an important part of SLF-R. Students worked on concrete business challenges under academic supervision.

According to Dekker, this practical element created much of the programme's added value. "The PhD projects were often more fundamental in nature. Graduation projects were much more directly linked to practical business challenges. Companies defined the problem themselves, and students set out to solve it."

The list of participating organizations was impressive, including ASML, DAF, IBM, Philips, Fokker Services, Vanderlande, NedTrain/NS, Thales, Voestalpine Railpro, Océ, Ceva, IHC Holland, Ortec and Marel Stork.



Sharing knowledge and insights

The results did not remain within the companies where the research took place. Through workshops and presentations, findings and best practices were shared with the wider SLF network. "Time and again, we discovered that companies in completely different industries were facing remarkably similar challenges," says Van Houtum. "A presentation at one company often triggered recognition among participants from other sectors. That cross-fertilization was one of the network's greatest strengths."

A foundation for the future

When SLF-R concluded around 2010, the collaboration did not end. On the contrary, its success laid the groundwork for later research programmes, including ProSeLo and ProSeLoNext, which were co-funded through TKI Dinalog.

According to the three professors, this may well represent the programme's most important legacy. "We were pioneers together," says Van Houtum. "Not only in terms of research content, but also in developing new ways for universities and companies to collaborate. SLF was the catalyst behind this."

Van der Heijden highlights another lasting outcome: "Many of the students who graduated during those years went on to work in service logistics. Some later became supervisors for new students themselves. In that way, a network emerged in which knowledge continues to develop and spread."

For Dekker, continuity is perhaps the programme's greatest achievement. "Many research projects are one-off initiatives. Here, a collaboration was created that is still continuing more than twenty years later. That is truly remarkable."

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