

Lean System®
Enterprise Resource Planning



The Agile ERP

Hero

A flexible response to supply chain collaboration enables innovation

Product lifecycles are becoming shorter. Service is an essential part of a product. Quality and speed requirements are on the rise. The number of product variations increases, while efficiency requirements get tighter. Customers expect prices to drop, although cost levels are rising.

A company's flexibility and innovativeness removing everything unnecessary and cooperating with suppliers meet the challenges of the globalising world. Success in demanding markets requires an appropriate management of unforeseen situations. Continuous development is an everyday method of human-sized steps – the ERP system is a vital part of this development.

Modern production control combines Lean thinking with agile thinking. The key goals of Lean control are to remove everything unnecessary, to utilise recurrence, and as a result, to



Lean System is the choice of profit-makers.

be able to focus on essentials. Agile production aims at flexible control during market changes. By combining these principles, a control method is achieved where recurring routines naturally support the changes required by the market. These are changes that open up new opportunities for the fastest players.

Lean System is a combination of lightness, flexibility and agility. This makes it the best choice for continuously innovative companies.



Success is doing things together with skill – and good tools

With Lean System, customer services and dynamic situations are under control. The system consolidates automated control and the ability of professionals to take action in changing circumstances.

As a result of the software's visual approach, it is easy to identify the essential information and get a good picture of the whole. Management is based on reliable and real-time information. In Lean System, up-to-date information is available for both inside the company and in the supply chain collaboration.

The system is fast and effortless to use. Extensive independent studies show that Lean System users are the most satisfied with the use of their ERP systems and the service they receive from their ERP partner.

The adoption of an ERP system is a starting point for future development, the first step in continuous change. The flexible system enables development and motivates the entire company to renew.





The automation of correct aspects of the manufacturing process will save more time and money.

Lean System helps to **develop operating methods**

Lean System supports several alternative control methods and their combinations simultaneously. The system can be used for controlling projects, customer-specific products, variations of standard products, standard products and spare part deliveries.

When the focus of the company's operating method shifts, it is easy to move from one control method to another. The company can follow several different control methods at the same time, according to the situation at hand.

Unnecessary work will be avoided through a combination of the best aspects of information system and people. The information system is at its best in the automation of well-defined

and recurrent functions and decisions. From the information flow, situations that require human expertise must be identified. Lean System separates routine situations from exceptional ones and provides the users with quick and well-visualised information when there is a need to take action using human decision-making. Automation is a tool, not a master of the way people work.

Lean System is able to cope with all situations; the user is not tied to the system's ready-programmed automated operating methods. New operating methods are based on innovations – they are always first a result of the creative insight of people, and automation only after that.



Transparent operations across functions



”Our turnover has grown more than 20 times in the last 5 years. During these fast changes, Lean System has standardised operations of our offices and created transparency to the whole corporation.

Over half of our turnover comes from assembly, and the rest from mechanisation. We have fourteen offices, one of which is based in Poland.

Our ERP is primarily based on orders placed by our customers. Some of our offices utilise forecasts delivered by customers, and we also manufacture products for storage to some extent. All control methods are implemented seamlessly in Lean System.

With the help of Lean System, product- and customer-specific profitability calculations are consistent and comparable between different units. For procurement negotiations, the shared ERP provides important volume details.

Shared operating processes make it easier for new units to commit to the Komasa Group’s objectives – it is not always necessary to re-invent the wheel. Lean System is quick and easy to adopt – the user interface looks good, and the functions are logical. In deployment, we have learned a lot from Tieto’s project know-how, and the deployment of Lean System is already a routine at our new units.”

Miikka Jämsen

Business Support Manager
Komasa Group



Smart business operations are controlled by using a smart ERP system.

Lean System **understands** **production needs**

Understanding customer services and controlling operations on their own terms forms the starting point of Lean System. By using the system, you can control an uncertain future, review the options, automate routines and allocate human competence and experience for demanding decision-making situations.

Lean System covers all core processes of industrial business operations. The system tracks the order throughout its lifecycle, all the way from planning to after-sales marketing. Lean System, spanning the whole order-delivery chain, develops the quality and

reliability of the company's operations, while improving the ability to react.

Lean System meets the requirements of changes and agility by supplementing the traditional system solution with workstation-based visual planning, notes, documents, alarms, automation by-pass options, and situation-specific control principles.

By using these tools, the changes and exceptions included in modern production are saved for shared use. When the essential information is available, the company's controlling functions and productive operations are enhanced by people.



Well-planned production leaves a sweet aftertaste



”In a year, we manufacture 13 million kilograms of liquorice and chocolate. If the liquorice produced in 24 hours would be placed in a line of Pepe liquorice bars, the line would extend to a distance of approximately 300 kilometres from our factory in Vaajakoski, Finland.

Manufacturing about 270 different products in three shifts and on dozens of manufacturing lines requires accurate production planning. Lean System automatically utilises sales forecasts and the order book, while providing reliable purchasing signals for material and packaging procurement. Lean System’s cross-run function of sales forecasts and material stock ensures optimal capacity for every production line, and also helps in the planning of HR resources.

The production planning for the Christmas chocolate season begins already in March. Liquorice manufacturing is steady all year round. Sudden peaks in the demand can also be controlled flexibly by using Lean System.

In the foodstuffs industry, it is important that the origin of a product’s raw material can be traced. Once a product lot is complete, the information is conveyed to Lean System through manufacturing entries. Location transfers and collection tasks in the storage are updated to the system via wireless connections. We can quickly trace the work stages and material lots of every individual bag of sweets.”

Export Coordinator **Anne Pulkkinen** and
Production Planner **Olli Launonen**
Panda Oy



Lean System is a powerful control tool
– both inside the company and in networks.

Lean System manages **networks** and **human interaction**

Companies are connected to a network by effective management. Network relations are diversified and require that the information system of the company is open in several directions. The demand is obtained from the sales network, the materials are ordered from the supplier network, components and capacity are purchased from subcontractors, and products are developed with design firms.

Lean System is easy to link to the system of the company, as well as to the systems of partners. Lean System can also be made accessible to partners – without compromising data security – by utilising a Web user

interface. Regular customers can view the status of the product storage from the open sales order system. Correspondingly, the responsibility for the adequacy of the materials can be allocated to subcontractors.

For everyone involved, open and reliable information establish a foundation for successful human interaction both inside the company and in the network. The operating preconditions of networks are further enhanced by Lean System's ability to convey accurate information, as well as alerts, notes and comments. Lean System also understands exceptional situations



A thoroughly effective chain

”In practice, our competitiveness refers to the competitiveness of our supply chain collaboration. During rapid growth, we have outsourced the assembly of moveable mining equipment in particular.

In order to enhance the production chain, we have also opened Lean System for our subcontractors. The solution has paid off – the controlling information can be utilised simultaneously by us and our partner.

Subcontractors receive real-time information from the system on upcoming orders, and they are themselves responsible for the component completion details. We have retained material acquisitions for ourselves; its management has been opened for subcontractors in Lean System’s Web portal.

The utilisation of shared information has improved the reliability of delivery and decreased material shortages. The amount of overlapping work has also been significantly reduced. Exceptions occurring in orders or manufacturing are always processed personally, they are never transmitted through the systems.

Lean System’s interfaces for Sandvik Group’s data warehouse system and global sales system also enable the utilisation of information at the level of the whole Group in production planning, for example.”

Production Manager **Pasi Järvenpää** (picture)
and Application Manager **Pentti Heikkinen**
Sandvik Mining and Construction





Lean System – built for
successful daily operations

An **investment** that gives you immediate **advantages**

A new ERP system must be deployed quickly and in a secure manner. The system delivery project is carried out according to the Lean principles: by eliminating unnecessary work stages and by focusing on the essential.

At its fastest, the solution can be deployed for utilisation in only three months. Lean System's ease of use guarantees that the big picture of the company's operations can be controlled in a visual and clear manner.

A successful deployment requires well-planned management of change. In the standard delivery model, the responsibilities and the flow of the project are clear: One person is responsible for the Lean System delivery, which means that the big picture will be retained, and cost efficiency will increase. The com-

pany's own project manager always has a direct communication channel to the person responsible for delivery. The company can focus on the key issues in its business and how Lean System can address those issues.

Throughout the lifecycle of the ERP solution, Lean System customers have access to Tieto's consulting, development, deployment and support services which are based on Tieto's strong industry expertise. Lean System is a solution developed by Tieto – the best professionals are always available. Lean System development is guided by research cooperation and customers who are forerunners in their respective fields. In this way, the system is continuously developed to meet the changing needs of the user companies.



From a **good feeling** to **excellent** results

”Lean System is one of our best investments – if not the best – that we have carried out during the 30 years we have been in business.

In a year, the rationalisation of the order-delivery chain has freed the capacity of two people who process papers and numbers to work on our core business. In a company of 35 employees, that is a lot.

We supply large foodstuffs industry companies with manufacturing lines that include coolers, proofing equipment and freezers. Our customer service has become more prompt. We respond quickly to offers, and documentation is delivered on time. We are in control of the whole delivery project, and the rapidly growing maintenance operations.

The fear of a gigantic deployment was unnecessary. The key to a successful deployment includes the questioning of the existing operating methods, and the adaptation of the processes to the system. In addition to careful preparations, the easy deployment of the Lean System was enabled by our committed personnel, Tieto’s reliable experts and the well-defined deployment framework.

Lean System is of exactly the right size also for a small project supplier. Ultimately, the choice was based on the good feeling – Tieto has kept its promises.”

Mikko Lehtinen

Sales and Marketing Director
Vulganus Oy

Altia

Antti-Teollisuus

Areva T&D

Bronto Skylift

Cupori

Ekeri

Fastems

Herrmans

Högfors Sahala

Javasko

Komas

LKI Kälöman

**Luvata Hitachi
Cable Thailand**

Metso Automation

Moventas

Neste Jacobs

Norpe

Panda

Paramet

Planmeca

Raumaster

**Sandvik Mining
and Construction**

Sinebrychoff

Sisu Akselit

Teknoware

Transtech

VM Group

VTI Technologies

Vulganus

Warkaus Works

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Tieto is a service company providing IT, R&D and consulting services. With approximately 16,000 experts, we are among the leading IT service companies in the Nordic countries and the global leader in selected segments.

We specialise in areas where we have the deepest understanding of our customers' businesses and needs. Our superior customer centricity and Nordic expertise set us apart from our competitors.

Tieto Forest & Manufacturing

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