Management Service

Choose certainty.
Add value.

Information on process analysis

You have identified your processes, now it is time to face the challenge of analysing them.
Processes can be analysed in a number of ways. The turtle model has proven itself in practice, as it summarises the essential points in a clear and comprehensible form. Further it forms the basis for systematic risk management.

The turtle model makes the employee more aware of overlapping work areas, reveals dependancies, creates transparency and transmits readings.
You detect weak points in your processes and can more rapidly find the solutions to reach your goal:

mastering the processes.

Analysis at its best

Or what Processes can Reveal about Themselves to the Company

TÜV SÜD Management Service GmbH

Process analysis with the turtle model

www.tuev-sued.com/processanalysis

The logic behind process analysis is to provide as clear a picture as possible of the ongoing processes running in the company. The turtle depicts a model, which combines a number of facts about the process in question.

Why bother?
Processes within a company are shaped by people. To ensure that these people are highly content at their work it is essential that the processes function perfectly. This can only be achieved when all participants are aware of and fulfil their role within a process.

In the framework of customer orientation and continuous improvement within a company the optimisation of efficiency, effectiveness, quality and the increase in process performance play a decisive role. This is only possible when a company views its processes and activities with a process orientation, analyses these and takes consequential improvement steps. This reduces e.g. the complexity and the costs of the processes.

The transparency, which arises through the turtle model, represents a decision basis for the management, creating and maintaining company values. E. G. in the acquisition of machines or in the introduction of a new product. Simultaneously risk aspects are also included and considered.

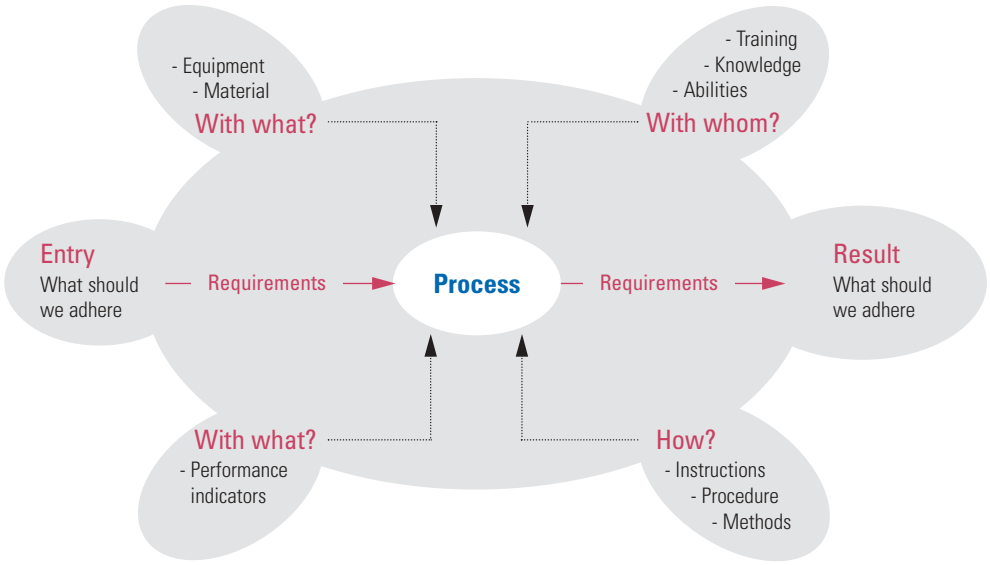
Further possibilities for use
The turtle model also provides a valuable service in
- Preparation for an internal and external audit,
- Risk identification and allocation,
- Clarification of common overlaps,
- Showing dependancies and links,
- Creating transparency.

The common analysis of a process is particularly successful when all participants are active (e.g. in quality circles). This approach not only makes the communication of process philosophy on all company levels easier but also leads to a better understanding of common overlaps and particularly of risks.

The turtle model

Head and tail represent the input and output of the process.

Process analysis according to the "turtle-model"



The four legs represent the pillars of the process:

1. Material ressources (equipment, material, infrastructure)
2. Personnel ressources (qualified personnel)
3. Available know-how (procedural manuals, methods, techniques)
4. Performance indicators (parameters, measurements)

The turtle model in practice

Download: www.tuev-sued.com/processanalysis

The most straightforward way to implement the turtle model is with the help of a structured form. It contains all relevant influence factors and enables a clear presentation of the process on one page. Even the most complex processes are clearly presented through this method.

Example for a standard process: "Contract review"

Worksheet for process analysis

Process description:	Contract review		
Process manager:	Mrs. Sally Sample	Process defined?	yes

With what (equipment, material)	Process risks		With whom (training, personnel, capability, knowledge)
• EDV System, incl. PPS • Internet connection	• Accuracy and precision of documents and EDP data • System disruptions • Insufficient virus protection in the small system	• None/insufficient introduction • None/insufficient knowledge of customer needs	• Qualified sales team • Teams for each department (development, CS, production) • Foreign languages, technical knowledge • Technical/business knowledge
Inputs	• No customer order • Insufficient base data • Incorrect analysis of competitors • Customer dissatisfaction • Customer demands cannot be met		**Output**
• Enquiry, material specification • Customer specific demands • Legal or official documents • Cost plan • Price policy • Analysis of competitors • Capacity			• Risk observation and estimation • Production assessment • Production calculation • Offer plan • Offer suggestion • Offer
With what (process indicators/parameters)	• Exceeding offer date • No measurable improvement • Trend analysis not meaningful enough	• Insufficient, false calculation • Outdated requirements, instructions	**How (instructions, procedures, methods, technique)**
• Running time up to submission of offer • Related offers/orders received • Profit, follow-up orders, customer satisfaction • Volume of orders • Number of amendments/enquiries			• Procedure to process description • Forms, acquisition surveys • EDP – input masks • Price lists, calculation scheme • Forms stipulated by CD • Forms for foreign business/completion • Material specification

Note: Please find a template of this chart at the end of the broschure.

Process name and responsible party

Guide to using the form

Enter here the name of your identified and defined process and state who is responsible for it.

What with?

Depending on the characteristic of the process, the influence factors such as infrastructure, IT, rooms, machines, materials and equipment of all kinds are stated here.

Who?

The qualifications of the party responsible for the process is questioned at this stage. The necessary applicable qualifications are considered in the same way as for a new employee or part time employee and in some cases necessary languages are sought.

How?

Instructions, procedures, methods and techniques, which are used in the process are at the fore here. This are e. g. procedural and work instructions, user surface of software, checklists and also laws, which must be adhered to.

Performance indicators

Each process must function and be reliable. Process parameters are the primary method of process control. Changes are detected and measures defined for dealing with these changes. The indicators to be defined here affect solely the process in question.

The aspect of process risks

As we know from daily working life, risks are ever present. Faulty infrastructures, badly trained employees, insufficiently detailled work instructions etc. can lead to errors and as such present a potential risk.

With the aide of the turtle model the risks are addressed in one working step with the process analysis. The questions "What with?", "Who?", "How?", which were already asked in process analysis, are used again.

Core of the turtle model

	Process risks		
With what?	• Accuracy and precision of documents and EDP data • System disruptions • Insufficient virus protection in the email system	• None/insufficient introduction • None/insufficient knowledge of customer needs	**With whom?**
Input	• No customer order • Insufficient base data • Incorrect analysis of competitors • Customer dissatisfaction • Customer demands cannot be met		**Output**
With what?	• Exceeding offer date • No measurable improvement • Trend analysis not meaningful enough	• Insufficient, false calculation • Outdated requirements, instructions	**How?**

Risk-management as a whole

Process risk consideration as a whole

This systematic summarising of risks in all processes can, following the summary, be taken onto a higher company level and enables observation from a different perspective. This consolidation of all risks can be the basis for the process orientated approach to risks within your company.

Strengths and weaknesses – recognition and understanding

You have defined your processes. You have analysed your processes.
Now you should concentrate on recognising and assessing the strengths and weaknesses of your process.

Observation and analysis using the turtle model enables you to obtain comprehensive details about your process landscape. Enter this information into a SWOT (strengths, weaknesses, opportunities and threats) analysis.

Download: www.tuev-sued.com/processanalysis

Strengths	Opportunities
•	•
•	•
•	•
•	•
•	•
Weaknesses	**Threats**
•	•
•	•
•	•
•	•
•	•

Note: It is important to know that the allocation is left to the subjective judgement of the party completing the SWOT analysis.

Suggestions, ideas, examples

www.tuev-sued.com/processanalysis

To make it easier for you to complete the turtle form, you find a number of examples of each area of the form on these internet pages. We have identified the following standard processes for you and have listed the contents as an example:

- Enquiry – Offer
- Guarantee
- Acquisition
- Order processing
- Production planning, provision
- Component production
- Customer satisfaction
- Management
- Assembly
- Personnel
- Complaints
- Dispatch
- Entry of goods

The internet pages are constantly updated and extended.

The "Process Forum"

Do you have your own ideas, are you looking for more suggestions or have you new examples for standard processes? Visit our Process Forum in the Internet. We would be pleased to include your experiences and suggestions on our internet site.

www.tuev-sued.com/processforum

Strengths	Opportunities
Weaknesses	**Threats**

Process description	Vertragsprüfung, Angebot
Process manager:	Process defined?

Management Service

With what (equipment, material)	Process risks		With whom (training, personnel, capability, knowledge)
Inputs			**Output**
With what (process indicators/parameters}			**How (instructions, procedures, methods, techniques)**

template

www.tuev-sued.com/processanalysis • www.tuev-sued.com/processforum

Summary

With the aid of the turtle model you have now observed and analysed your processes from the most diverse perspectives. You have laid down the basis for company-wide risk management. You have identified your strengths and weaknesses, opportunities and risks. You now have the basics to interpret these results and to begin to use them within your company.

Notes

TÜV SÜD Management Service GmbH

Ridlerstraße 65
80339 Munich
Germany
Phone: +49 (89) - 57 91 - 25 00
Fax: +49 (89) - 57 91 - 21 97
processanalysis@tuev-sued.com
processforum@tuev-sued.com

Date of issue: 01/06; pi_processanalysis_e