

Controlling Process KPIs

A Guideline for
Measuring Performance in
Controlling Processes

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ANSCHRIFT

Haufe-Lexware GmbH & Co. KG
Munzinger Straße 9, 79111 Freiburg
Telefon: 0761 898-0, Fax: 0761 898-3990
E-Mail: online@haufe.de
Internet: <http://www.haufe.de>

Kommanditgesellschaft, Sitz Freiburg
Registergericht Freiburg, HRA 4408
Komplementäre: Haufe-Lexware Verwaltungs GmbH,
Sitz Freiburg, Registergericht Freiburg, HRB 5557;
Martin Laqua

Geschäftsführung: Isabel Blank, Markus Dränert, Jörg Frey, Birte Hackenjos, Jens Köhler,
Matthias Mühe, Markus Reithwiesner, Joachim Rotzinger, Dr. Carsten Thies
Beiratsvorsitzende: Andrea Haufe
USt-IdNr. DE812398835

REDAKTION

Dipl.-Betriebswirt (FH) Günther Lehmann (v. i. S. d. P.)
Haufe-Lexware GmbH & Co. KG
Munzinger Straße 9, 79111 Freiburg

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Preface

The International Group of Controlling (IGC) is trying to promote the function and role of controllers and to establish an internationally accepted concept of controlling. With the Controller Dictionary, the mission statement for the controller, the controlling process model, as well as DINSPEC 1086, the IGC has created important foundations for effective controller work and an internationally accepted controlling standard.

The IGC controlling process model, published in 2010, provides a framework for structuring controlling activities as regards both time and content. It defines coordinated objectives, content, inputs and effects for the individual controlling processes. It thus serves managers and controllers as a guideline for effectively designing their cooperation in the management process of setting objectives, planning and controlling.

This brochure logically extends the controlling process model by providing process KPIs. For the first time, a comprehensive concept for determining the „performance“ of controlling processes is presented. While the process model serves as a „blueprint“ for generally structuring controlling activities, the process KPIs provide the required transparency to optimise them continuously. Company-internally, they enable a critical analysis of developments over time. Externally, they make it possible to assess the firm's status compared to other companies.

Questions regarding the efficiency and effectiveness of controlling processes no longer have to be answered following gut instincts. Particularly in a business environment where companies increasingly scrutinize the value added by their controlling activities, this is crucial.

The mission statement for controllers of the IGC states: „controllers ensure the transparency of business results, finance, processes and strategy and thus contribute to higher economic effectiveness“. This now also holds true for the controlling processes themselves.

The Managing Committee of IGC would like to thank all members of the IGC „Controlling Process KPIs“ working group.

Prof. (FH) Dipl. Ing. Dr. Heimo Losbichler
President and Chairman of the Board of the International Group of Controlling (IGC) and Deputy Chairman of the International Controller Association (ICV)

Members of the IGC „Controlling Process KPIs“ working group and authors of this brochure

The controlling process KPIs were developed and this brochure was written by the members of the IGC „Controlling Process KPIs“ working group from January 2011 to May 2012. In several full-day workshops, content was generated on the basis of the members' experience and expert knowledge; lively discussions took place and were brought to a conclusion. The time between workshops was used to flesh out specific content and coordinate this in talks with experts from outside the working group. All members of the group have many years of controlling experience in various sectors, in management consulting and the practice-oriented further education in controlling of controllers and managers.

The members of the IGC „Controlling Process KPIs“ working group and authors of this brochure are:

MMag. Christoph Blaha

Key Account Manager Inhouse Trainings, Austrian Controller Institute

Mag. Andreas Graf

CFO, Vip mobile d.o.o.

Dipl. Kffr. Jana Heimel

Managing Consultant, Horváth & Partners Management Consultants

Dr. Andreas Matje

Senior Vice President Controlling, OMV AG

Tobias Meier

Group Leader Business Field and Project Controlling, EWE NETZ GmbH

Dr. Rita Niedermayr

Managing Director, Austrian Controller Institute and Contrast Management-Consulting GmbH

Dipl.-Kffr. Waltraud Schumacher

Controlling Expert, ZF Friedrichshafen AG

Mag. Hubert Tretter

Prinzipal, t4t Management Consulting

Mag. Mirko Waniczek

Practice Leader Controlling & Finance, Contrast Management-Consulting GmbH, Head of „Controlling Process KPIs“ working group

The following members of the Managing Committee of IGC were also included in the design process as advisors and to ensure quality control:

Prof. (FH) Dipl.-Ing. Dr. Heimo Losbichler

Head of Studies „Controlling, Accounting and Financial Management“ at the University of Applied Sciences Steyr, Deputy Chairman of the ICV, and President and Chairman of the Board of the International Group of Controlling

Istvan Rado

Senior Partner, Managing Director, IFUA Horváth & Partners Kft., Budapest

Dr. Lukas Rieder

Managing Director, CZSG Controller Center St. Gallen AG

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Management Summary

KPIs play a major role in corporate control and thus also in controllers' everyday work. The IGC's understanding of controlling defines it as a mutual process run by managers and controllers. This brochure for the first time provides them with KPIs that make a status assessment of the individual controlling processes possible. This kind of split responsibility results in a multitude of influences on controlling, yet on the level of the controlling processes differentiated responsibilities can still be determined. For those processes mainly in the controllers' responsibility, this enables a critical look at their own performance, e.g. the promptness, quality or costs. Using the KPIs recommended, process performance can be measured, conclusions can be drawn on their performance potential and impulses for necessary changes can be derived. This does not, however, replace an analysis and discussion of the measurement results, which is always required.

The development of the process KPIs is based – as in the controlling process model – on the definition of the term „controlling“ and the controller's mission statement of the IGC. „Controlling“ in this sense is the whole business process of setting objectives, planning and control in the company.

The IGC controlling process model shows the business process of „controlling“ (business process as level 1 of the process model) and comprises ten main controlling processes (main process as level 2): strategic planning, operational planning/budgeting, forecasting, management reporting, cost accounting, project and investment controlling, risk management, function controlling, management support, and the enhancement of organisation, processes, instruments and systems.

For these main processes, financial and non-financial KPIs are recommended, which for each process enable a comprehensive measurement of the performance in the dimensions of quality, time and costs. The controlling process KPIs hence supplement the controlling process model, which is a standard map for companies' controlling processes that does not depend on size and sector, and enable the performance measurement of the controlling processes and the controller organisation. This closes an existing gap in the control of business processes in companies and makes more transparent controlling processes possible. Process-related objectives create a bridge between controlling processes and the process KPIs (Key Performance Indicators). These objectives do not just lead on to the KPIs, but also help to establish a uniform understanding of controlling. Managers and controllers get specific hints

for checking their concepts and developing the controlling processes further.

The KPIs are kept as general as possible, in order to ensure their transferability to wide areas of corporate practice. For each process, and additionally for the controller organisation, a minimum set of recommended KPIs is presented. Moreover, the appendix provides additional KPIs for more comprehensive measurement in the form of a scorecard.

1 Aim and Structure of the Brochure

This brochure aims to provide managers and controllers with KPIs that facilitate assessing the actual stages of the controlling processes and that support their active management. The controlling processes and KPIs described are based on the definition of controlling passed by the IGC, „Controlling is the whole process of defining objectives, of planning and controlling (in the sense of steering and regulating) and includes all relevant financial and commercial aspects“. Hence the term „controlling“ does not depend on the position in the organisational structure to which those in charge of controlling are assigned. However, when subsequently KPIs will be defined and calculated, it will be pointed out whether these refer to a controlling process or the controller organisation.

Aim

This brochure contributes to the aim of transferring thinking in terms of processes and process management to controlling and the organisational unit in charge of controlling. Process management is understood to denote the analysis, evaluation and design (improvement) of processes. Process management facilitates raising the efficiency and effectiveness of processes by e.g. reducing long lead times and improving insufficient flexibility. By virtue of the present process model and the process KPIs, the controlling processes are identified and hence can be analysed and controlled.

Drawing on the IGC's process model, this brochure aims at suggesting KPIs which facilitate measuring the performance in the main controlling processes. These KPIs are defined, described in a standardised form, and illustrated by means of concrete guidelines for interpretation. In this context – like in the context of the controlling processes – the performance KPIs are intended to serve to complement the universally endorsed controlling concept and to offer a standardised controlling terminology.

Performance measurement of the controlling processes is to fulfil the following requirements:

- The KPIs are to be intuitively comprehensible.
- The set of KPIs per process is to be manageable.
- The KPIs are computed pragmatically, i.e. definition of KPI as simple as possible, and lower frequency of measurement for more complex KPIs.
- KPIs across processes in combination with process-related KPIs render a comprehensive view of the controlling processes.
- A comprehensive process management entails the dimensions of quality, time, and cost on the basis of quantitative and qualitative criteria.

This brochure targets members of the organisational unit in charge of controlling as well as managers, and customers of controllers in the company, and all those that are involved with controlling from a

Target group

theoretical perspective. It intends to supply readers with a guideline as to how they can evaluate and design controlling processes.

Structure of the brochure

Following the introductory chapter, this brochure includes four further chapters. Chapter 2 briefly explains the foundations of the working group. Chapter 3 provides a quick overview. It presents the most relevant KPIs („top KPIs“) and portrays a comprehensive view of performance-relevant controlling processes and of the benefit these provide to a given company. Chapter 4 begins by discussing KPIs that can be used across processes and details both the process KPIs for the main controlling processes and KPIs intended to measure the performance of the organisational unit in charge of controlling. Chapter 5 offers a conclusion. The annex provides KPI scorecards for the purpose of comprehensive measurement of the performance of both the individual processes and the organisational unit in charge of controlling.

The process KPIs are based on the ten main controlling processes and represent KPIs for these processes as well as for the organisational unit in charge of controlling. A standardised framework is used for illustrating and discussing the KPIs. To ensure smooth readability, the following framework is used for each main process:

- **Objectives and Content of the Process:** Objectives and content per main controlling process are briefly described in order to provide a foundation for discussing the corresponding process KPIs.
- **Specific Project Objectives (quality, time and cost):** comprehensively optimising controlling processes is guided by objectives of quality, time, and cost, respectively. These multi-dimensional project objectives further the understanding of excellent process performance and hence provide the reasoning for the selection of the respective KPIs. The process objectives are listed in the marginal notes and provide guidance throughout the document.
- **KPIs:** the KPIs serve to measure achievement of the process objectives.
- **IGC-Recommendation:** In some cases it is particularly important to measure a process objective and the IGC hence explicitly recommends doing so; these are marked with „IGC Recommendation“. Recommended KPIs are presented in a KPI box including information on their calculation and unit denomination.
- **Hints for Application in Practice:** Hints on designing the individual controlling processes complete the information provided.
- **Process Scorecard:** The annex contains a scorecard per controlling process. The scorecard includes a set of supplementary KPIs beyond the objectives and KPIs recommended and a brief interpretation of these KPIs. Specific requirements and possible limitations in measuring a KPI are pointed out. The recommended KPIs which have already been presented in detail are marked with the IGC logo in the scorecard.

IGC-
Recommendation

The authors ask for the readers' understanding that no gender-neutral terms are used as it appears simpler to adhere to the customary terminology of controlling.

2 Basics of Performance Measurement in Controlling Processes

2.1 The IGC Mission Statement for the Controller and the Controlling Process Model

Controllers design and accompany the management process of defining goals, planning and controlling and thus have a joint responsibility with the management to reach the objectives.¹ They assume the role of internal consultants and thus fulfil the following characteristic core tasks:²

Range of tasks of the controller

- ensuring the transparency of strategy, business results, finance and processes,
- coordinating sub-targets and sub-plans in a holistic way,
- organising a reporting system that is oriented towards the future and covers the enterprise as a whole,
- moderating and designing the management process of goal-finding, planning and management control so that every decision-maker can act in accordance with agreed objectives,
- safeguarding the provision of all relevant controlling information to managers,
- developing and maintaining the controlling systems.

The terms „controller“ and „controlling“ have to be distinguished. „Controlling“ refers to the process of setting objectives, planning and controlling a company, where managers and controllers cooperate and assume mutual responsibility. Controllers have two roles in the company. On the one hand, they are the internal consultants of the firm and the partners of management and thus co-responsible for achieving objectives. On the other hand, controllers are service providers and responsible for providing correct and necessary information for management control.

Controller and controlling

The controlling process KPIs are based on the controlling process model. For this brochure to be consistent in itself, as well as meaningful and readable, the controlling process model is also discussed in brief.³

Controlling process model

¹ The IGC's mission of the controller is available at http://www.igc-controlling.org/DE/_leitbild/leitbild.php.

² see International Group of Controlling (ed.) 2011, p. 16f

³ developed from International Group of Controlling (ed.) 2011, p. 19ff

The controlling process model documents, analyses and designs controlling processes, and also aids the communication on these processes. In order to further a unified understanding of controlling, it includes all processes that can be attributed to controlling and is valid for all companies, irrespective of industry and size.

Controlling main processes The controlling process model includes ten main controlling processes (see Fig.1) Responsibility for these processes can be anchored in management related to the process, in the controller organisation or as a mutual responsibility.

Allocating process responsibilities

„Controlling“ is the common task and responsibility of managers and controllers. The IGC controlling process model thus in all controlling processes includes inputs of managers and controllers, who cooperate in varying intensity.

In addition to this definition, however, a clear process responsibility can be identified for individual processes (e.g. controllers' responsibility for cost accounting). In other processes, responsibility can be allocated based on the principle of predominance (e.g. responsibility for strategic planning according to the dominant content design in management).

Allocating process responsibilities according to Fig.1 is to help find out whether performance measurement in an individual process primarily enables a status assessment for controllers and/or managers, yet without measuring their input contributions in detail. An isolated assessment of the controllers' inputs can be effected by limiting the analysis to the organisational-structure unit of „controller organisation“.

Hierarchical process model The controlling processes are depicted in a 4-level model:

- Level 1: business process controlling as an overall management process
- Level 2: ten main controlling processes (e.g. operational planning and budgeting)
- Level 3: various sub-processes as major process steps within the main processes (e.g. combining and consolidating individual plans)
- Level 4: individual activities required within the sub-processes (e.g. entering plan data in the data base).

The process KPIs are based on the controlling process model and further specify the level of the main controlling processes (level 2).

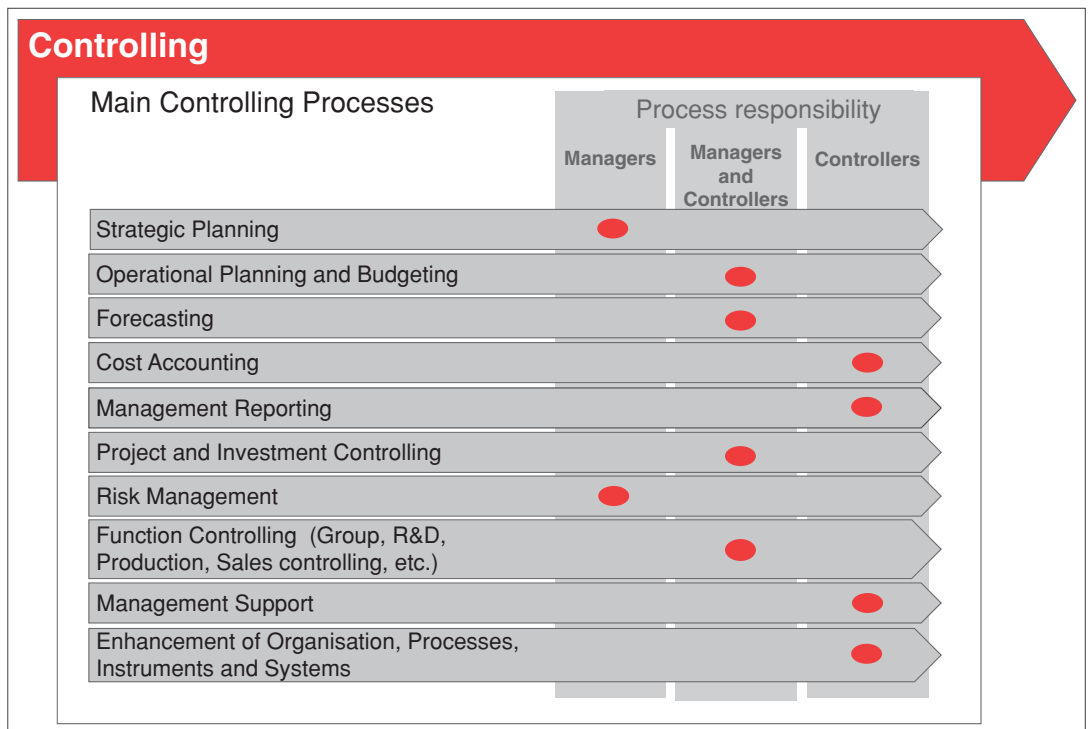


Fig. 1: Controlling process model

2.2 Performance Measurement in Controlling Processes

„What you can measure, you can manage, and what you want to manage, you have to measure!“⁴ Based on this guideline, only targets that can be measured should be used in performance measurement. Process owners are responsible for the use of resources and performance in the processes. In order to take this responsibility and be able to continuously monitor and improve the processes' performance, active performance measurement is required. This brochure is based on the definition of performance measurement as establishing and using often several quantifiable units of measurement in various dimensions (costs, time, quality, ability to innovate, customer satisfaction [...]) that are used to evaluate the effectiveness and efficiency of the inputs and input potentials of a variety of objects [...] in the company.⁵ Performance measurement thus includes the (objectively measurable) assessment and evaluation of work results and performance.

Performance measurement in controlling

⁴ quoted from Roos et al. 1997, p. 7

⁵ quoted from Gleich 2001, p. 11f.

At the same time it must be noted that in companies often primarily financially-oriented performance measurement dominates. This is unsuitable for processes in general and controlling processes specifically. In order to measure processes comprehensively and at the same time have a model that can simply be translated into corporate practice, the performance measurement of controlling processes takes place in 3 dimensions:

- quality
- time and
- costs.

One-sided financial control aimed at short-term optimisation is thus avoided and an orientation towards customers' needs, taking future-oriented and multidimensional KPIs into account, is furthered. The performance measurement of controlling processes hence goes far beyond the financial evaluation of output achieved, in that it ensures transparency not just from a financial but also a performance point of view. By including the non-financial dimensions of „quality“ and „time“, also the causes and drivers (financial) of output quantities are covered.

The process objectives in these dimensions can be conflicting: e.g. there is often a trade-off between high process quality (e.g. correct, relevant and visually convincing reports) and fast availability („fast close“). Process-related targets often do not simply aim at maximisation or minimisation, as e.g. minimising the resources used can result in quality problems (e.g. increasing the limit for initiating an investment appraisal). Maximising available resources makes no sense due to the law of diminishing marginal utility (e.g. extending the capacity of the controller organisation, in order to support subsequent organisational units personally and intensively). The benefit of structured and institutionalised performance measurements lies in the systematic detection of these conflicting objectives. Although it is possible to focus on individual KPIs (e.g. lead times in planning), it is always important to get a plausible picture that is, in total, related to the respective controlling process (e.g. lead times in planning combined with the number of planning loops and the resources used).

Types of KPIs In performance measurement

- absolute and relative
- quantitative and qualitative as well as
- input-oriented and output- or effect-oriented

KPIs and units of measurement are relevant. The KPIs suggested include both absolute and relative KPIs. Relative KPIs have the advantage of generally being suitable for benchmarking purposes. The relative use of resources for controlling (or in the controller organisation, e.g. as a

cost-sales relation) can be more easily compared across companies than resources used absolutely (e.g. number of FTEs).

Quantitative KPIs, based on clearly measurable factors (e.g. costs or time), can be measured and transferred to corporate practice more easily than qualitative KPIs (e.g. satisfaction). In this brochure, therefore, mainly quantitative KPIs can be found.

Measuring input-oriented parameters has the disadvantage of enabling only the indirect deduction of target achievement (e.g. measuring whether there was investment in training and thus the indirect deduction that the qualification of the employees trained has improved). Impact-oriented factors measure the result of the process (relating to a target profile, qualification has increased by x% or y points). The drawback of impact-oriented elements (measuring the outcome) is the frequently complex measuring constructs, the separate data collection required and the lower measuring frequency. Depending on how relevant for practice, thus, both input- and outcome-oriented factors are used.

Ideally, the basic data required for establishing a performance KPI are available from the system. The more individual the data collection process is (e.g. explicit surveys, additional records, ad-hoc estimates, interviews), the more difficult it is to provide information in time or in short cycles. In addition to explicitly recommended Top KPIs, the authors have decided to present a broad range of KPIs, which do not always justify the additional measuring effort required in every organisation. In general, when defining the KPIs, for pragmatic reasons surveys and interviews were only included in a few cases (e.g. when analysing „customer satisfaction“). The readers can decide themselves which of the KPIs seem relevant for their own organisations and, from a cost-benefit point of view, can be measured.

Cost-/benefit
relation

KPIs must be clearly defined

All KPIs used must be clearly defined and documented (e.g. in a controlling handbook, see Fig.2). Additionally, for those KPIs that are not available from the system, KPI responsibilities (responsibility for data provision) have to be defined and anchored in the documentation.

Performance measurement makes it possible to detect performance gaps, e. g. not meeting internally defined targets or external benchmarks (e.g. presentation of the monthly report within 10 days, target or benchmark is within 6 days). In order to close these performance gaps, specific measures are required (e.g. automatisisation of report writing). In order to actively manage the reporting process permanently, though, a continuous improvement process (CIP) is necessary. A CIP makes it possible to supervise the process based on KPI monitoring, to safeguard achieved improvements and to implement further optimisation measures. Linking

Continuous
improvement

these optimisation targets with internal incentive systems (e.g. management by objectives), supports the responsible persons in taking responsibility of the processes and connects performance measurement with the management. For processes for which the controller organisation is responsible, the head of the controller organisation is thus the direct addressee of performance measurement. In these cases, it is thus advisable to draw up specific performance agreements (service level agreements, SLAs) with internal clients, based on the process KPIs, in order to make the process safer for both partners by clearly defining the service (e. g. content, scope and date of the monthly report).

Controlling Process: Management Reporting	
KPI: Punctuality	Number: 11
Dimension: Time	Objective: Current, on-time information
Definition / calculation (formula): Standard reports presented on agreed date (number) / total reports (number) * 100	Note / Interpretation: Reliability of the reporting schedule
Unit: %	
Data source: Survey	Dates of survey (periods of survey): monthly
Relevant as benchmark yes	Responsible: Walter Kempowski

Fig. 2: KPI documentation

2.3 Approaches to KPI Variation

For the KPIs discussed in chapters 3 and 4, many different variants can be used that, for simplicity's sake, will be discussed centrally rather than with the individual KPIs.

Splitting KPIs In this brochure, absolute KPIs are shown on an aggregate level, e.g. process costs of a main controlling process. Process costs and capacities can also be split into components and so provide more detailed information, e.g. process costs

- per sub-process according to the process model: operational planning and budgeting differentiated by the sub-processes „establishing and communicating planning premises and top-down targets“, „combining and consolidating individual plans“,...
- by cost pool: personnel costs, external inputs,...
- within or outside the controller organisation
- by qualification profile: senior controller, junior controller,....

In this brochure, relative KPIs are related to an exemplary benchmark value, e.g. process costs related to sales. In practice, other values might be relevant, e.g. process costs related to

Variation of the benchmark value

- total costs or individual cost pools or
- headcount or FTE.

Some KPIs, e.g. investments that are made without capital investment analysis, can be measured based on numbers (number of investments without capital investment analysis/number of total investments) or based on volume (EUR investments without capital investment analysis/total EUR investment).

Number vs. euro

As long as explicitly economic KPIs are used in KPI measurement (e.g. deviation of EBIT according to forecast from actual EBIT), this reflects the crucial importance of operating income in controlling. In practice, however, alternatively or additionally other reference units might be relevant, e.g.

Variation of the reference unit

- Pre-tax profit
- Sales margins or
- Return on capital.

Readers can decide themselves for individual companies and situations whether it makes sense to use the KPI definition or one of the KPI variants suggested in this brochure.

2.4 Risks and Side Effects of KPI Interpretation

Measuring process performance in know-how based, management-supporting processes is more difficult than in transactional processes. At times, also external factors influence the measurement result. So it is not impossible that, on the basis of a KPI measurement made (and, building on this, internal or external benchmarking) wrong conclusions are drawn, as influences on the measurement result are not transparent or are misinterpreted.

Interpretation of KPIs

As this is a challenge in all controlling processes, the benefits, but also the limitations, of performance measurement in controlling processes are illustrated in a selected KPI example („lead time of planning“).

- Main controlling process: operational planning and budgeting
- Process dimension: time

- Process-related objective: short planning process
- KPI: lead time
- Calculation: working days from start (planning letter) to finish (approval, e.g. by supervisory board)
- Unit: working days

Benefit of measuring KPIs The KPI „lead time“ operationalises the process goal of a „short planning process“. The process goal is based on the hypothesis that shortening the planning processes increases the efficiency of planning and can be achieved without quality loss. The quality of planning can even be increased because a short planning process allows for a later planning start and the budget is therefore based on more valid actual and forecast data. Measuring this KPI therefore makes sense, is useful for the management and can provide the stimulus to further develop the planning and budgeting process.

Limitations of measuring KPIs In fact, this KPI measures only the duration of the planning process at a point or over time and no statements on the quality of planning are possible. The duration of planning and its change over time are shown as a symptom by the KPI, while the causes of increases or decrease in lead time would have to be measured using separate KPIs (e.g. „number of planning objects“ to measure an increased or reduced level of detail of planning).

Ultimately this KPI – due to the fact that controlling is effected by a cooperation of managers and controllers – is also influenced by factors controllers cannot influence, such as:

- organisational framework (matrix organisation requiring extra coordination efforts)
- technical framework (scope and quality of IT support) or
- management behaviour (lack of adherence to schedules, indecisiveness).

Process optimisation is so made more difficult. If the reason for the problem lies in the controller organisation itself (e.g. complex planning method), action can be taken directly based on the performance gap detected.

Explicitly showing the limitations of KPI-based performance measurement by means of specific interpretation notes is to make it easier for readers to figure out for a KPI whether valid results are possible when the KPI is measured in their own companies or whether only an integrated view of several KPIs creates a meaningful picture.

3 Top KPIs of the Controlling Processes

Process performance The top KPIs are a careful selection from the KPIs recommended and, as a summary, measure the achievement of central objectives across all controlling processes. The more comprehensively goals are attained, the

better processes work and the better the „performance“. In addition, the top KPIs also cover central aspects of the controller's mission statement, e.g. creating transparency, coordinating diverse planning procedures, providing a relevant reporting system, offering active support and advice for internal clients, and further developing the controlling systems (see chapter 2.1.).

Do companies profit from performant controlling processes? Does a benefit arise, e.g. by providing actively fast available and correct information for the management functions? It can safely be assumed that controlling processes improve the quality of decisions and that better management results in economically more favourable outcomes. The benefit of controlling lies e.g. in improving results through better-quality decisions, resource allocation and control of the organisation. Also from the point of view of the controller's self-conception, it seems like an attractive and motivating goal to actively contribute to the company's economic success. This is also in line with the self-commitment anchored in the IGC mission statement: to accept co-responsibility for attaining financial goals. Exactly measuring the benefit, e.g. by developing parameters such as the EBIT margin, however, is – due to the many influential factors that are independent of the quality of controlling and the controllers' services – not possible. Still, the hypothesis that controlling brings benefits can be illustrated as follows and operationalised by means of the top KPIs:

Benefits from
controlling

Controlling as a common task and responsibility of managers and controllers brings benefits by

- controllers and managers permanently developing the controlling processes further in order to meet current requirements;
- the management, within strategic planning, agreeing on specific initiatives with the controllers' help, and managers as well as controllers following their implementations on an ongoing basis;
- showing in multi-year planning the development path of the company and securing the full closure of financial performance gaps through defined measures;
- having a short budgeting process that is based on a valid data basis and managers, supported by controllers, setting both challenging and qualitatively high-level goals;
- having reliable cost and return estimates for products, projects and investments;
- recognising sources of success (or failure) by means of obligatory actual calculations and turning this into future improvements;
- controllers, if required, quickly providing a detailed basis for decisions;
- having forecast results that withstand scrutiny and are available quickly and so enable management to act;

Controlling Process KPIs

Process-related objectives	KPI	Calculation of KPI	Unit	
Enhancement of Controlling				
timely, structured, systematic enhancement	→ scope of process optimisation	controlling processes optimised in the past two years	number	→
Strategic Planning and Strategy Implementation				
consistent implementation of strategy	→ degree of strategy implementation	planned strategic initiatives (number) / implemented strategic initiatives (number) * 100	%	→
identifying a development path over several years incl. indication of financial performance gaps to be closed (gap closing)	→ explanation gap	EBIT gap not accounted for by measures according to multi-year planning p.a. (EUR) / EBIT (EUR) according to multi-year planning p.a.* 100	%	→
Operational Planning and Budgeting				
challenging quality targets	→ degree of strain (forecast)	EBIT budget (EUR) / EBIT forecast (EUR) * 100	%	→
short planning process	→ lead time	working days from start (planning brief) to finish (SB approval)	WD	→
Project and Investment Controlling				
reliability of cost and return forecast	→ quality of prognosis	projects (investments) at actual costs better than, or equal to, budget (number) / total projects (investments) (number) * 100	%	→
learning from completed projects (investments)	→ degree of coverage actual calculation	projects (investments) with actual calculation (number) / total projects (investments) (number) * 100	%	→
Cost Accounting				
identifying sources of success (failure)	→ quality of prognosis	average [(contribution margin actual calculation (EUR) contribution margin preliminary calculation (EUR)) / contribution margin (EUR) preliminary calculation * 100]	%	→
fast accessibility of calculations as required	→ response time	working days from start (request) to finish (presentation calculation)	WD	→
Forecasting				
binding nature and accuracy	→ forecast variance	(actual EBIT (EUR) - EBIT forecast (EUR)) / EBIT forecast (EUR) * 100	%	→
short forecasting process (standard forecast)	→ lead time	working days from start (according to schedule) to finish (presentation of forecast result)	WD	→
Risk Management				
accurate quantifying of opportunities and risks	→ risk variance	(actual result (EBIT, EUR) - most likely result according to risk management (risk adjusted EBIT, EUR)) / risk adjusted EBIT (EUR) * 100	%	→
Management Reporting				
punctual information	→ punctuality	standard reports presented on agreed date (number) / total standard reports (number) * 100	%	→
timely information	→ lead time	working days from start (end of month) to finish (standard report completed)	WD	→
Management Support				
adequate use of resources / support orientation	→ capacity (FTE)	FTE management support / FTE controller organisation * 100	%	→
Controller Organisation				
adequate use of resources / costs at benchmark level	→ costs of controlling organisation (sales)	costs controller organisation (EUR) / sales (EUR) * 100	%	→
fulfillment of customer needs	→ customer satisfaction	survey: mean	scale 1-5	→

Fig. 3: Top KPIs of the main controlling processes

Controlling Process KPIs

Significance	Interpretation note
continuous need for monitoring whether the 10 main controlling processes cover the current controlling needs and whether potentials for optimisation can be identified, need for adaptation where appropriate	KPI comprises heterogeneous development measures (e.g. new planning concept, software introduction), for pragmatic reasons these measures are not weighted
the more fully strategic initiatives are implemented, the higher the probability that strategic objectives are achieved (e.g. sales, market share, cost, and sustainability targets)	high quality of planning is assumed; strategic objectives to be reached need to be operationalised; project plans ensure implementation; as an alternative to measuring the degree of implementation in terms of numbers, budget volumes or expected influence on results can be weighted
achieving the milestones set in multi-year planning starts from the running business and must be fully backed with specific measures	the actual implementation of measures as well as their effectiveness need to be monitored separately
"challenging nature" of budget targets, measured ex ante	budget in comparison to the forecast on which planning is based; relations to results and volumes constitute the most relevant bases for planning; influence of external factors needs to be considered
increasing planning efficiency by reducing the length of the planning process; reducing the length of the planning process permits a later starting date and hence a more valid starting point	diverse factors and conditions influence duration of planning (complexity of the organisation or the business, degree of planning detail,...); assumes that lead time can be shortened without an associated decrease in quality (e.g. by reducing idle times)
indicator of the quality of the investment analysis and of the binding nature of an evaluation ex post	implies the obligation to conduct a project calculation (investment analysis) and post-calculation; establishing thresholds to limit calculations to important projects can be useful; comparability of pre- and post-calculation can be hampered by project amendments, management decisions or other factors; availability of historical data potentially limited in the case of long-standing investment endeavours
only when an actual calculation is made, it is possible to identify sources of success (failure) and to learn from incorrect calculations	measures whether post-calculations are made; in addition, comparability of pre- and post-calculation needs to be considered
indicator of the preliminary calculation quality; implies the obligation to conduct both a preliminary and an actual calculation	presupposes standard direct costing; variance can also result from external influences (e.g. unanticipated developments in acquisition prices)
the faster calculation results are produced, the higher is the usability of cost accounting in the operative business	assumes that response time can be shortened without an associated decrease in quality (e.g. by reducing idle times); dependent on availability of data from preceding systems
high variation between actual and forecast indicate poor quality and binding nature of forecast	the interpretation needs to differentiate between external and internal influences as also major changes in the environment lead to deviations (trigger ad hoc forecasts)
increasing efficiency of forecast by reducing length of processes; increasing management's capacity to act as forecast is produced in a timely manner (as part of management reporting)	diverse factors and conditions influence the duration of the forecasting process (degree of detail, extent of (de)centralisation, ...); assumes that lead time can be shortened without associated decrease in quality (e.g. by reducing idle times).
the better the risk management, the lower the variance from the result actually achieved	assumes aggregated effect of risks on a top KPI; quality of risk management also depends on how top managers (risk owners) and risk controllers work together
reliability of the reporting schedule	can also indicate shortage of resources in the reporting process or in upstream systems
timely provision of information increases the management's capacity to act	assumes that lead time can be reduced without an associated decrease in quality (e.g. by reducing idle times); to achieve significant acceleration, upstream systems (e.g. financial accounting) need to be included in the process of optimisation.
indicator of the relative importance of management support	resources employed depend on the role which top management assigns to controllers ("permitting" an active role)
efficiency of controller organisation (with qualitative output / effectiveness remaining equal)	cost of goods and of outside services as well as internal cost not allocated, if any, (e.g. cost of relevant IT systems) is to be considered; sales ratio of limited significance for interpretation where prices are volatile
satisfaction of internal clients with the controllers' services; 1 ... very satisfied, 5 ... very dissatisfied	assumption: survey is conducted correctly (e.g. avoidance of distortions, bias)

- quantifying exactly, supported by controllers, the opportunities and risks of line functions and minimising surprises in the attainment of central company objectives;
- controllers providing up-to-date management reports on time;
- using controller resources on a large scale for advising the management;
- keeping the costs of the controller organisation at benchmark level and
- controllers fulfilling the needs of internal clients to their satisfaction.

Fig. 3 shows the selection of top KPIs from the KPIs recommended that enables an overall performance measurement of the controlling processes. This performance measurement can be elaborated on, related either to the process (see chapter 4.2 to 4.11) or related to the controller organisation (see chapter 4.12).

Adjust general recommendation on individual requirements

As the recommended KPIs are kept general and so cannot take into account sector- or company-specific requirements and conditions, it is up to the respective companies to decide on practicability of the KPIs and their measurement as well as on the frequency of measurement.

4 KPIs for Controlling Processes and the Controller Organisation

4.1 KPIs relevant across processes

Process responsibility for controlling processes has been assigned to managers and/or controllers (see Fig. 2). However, for the KPIs presented the following still holds:

KPIs, in a „controlling“ context, refer to the process of controlling, irrespective of where the persons responsible for fulfilling the task are to be found in the organisational structure. The differentiation „within/ outside the controller organisation“ is possible for cost-related and capacity-related KPIs.

If controllers are to deal with a task, this is explicitly stated and the term „controller organisation“ is used for anchoring them in the organisational structure.

In order to make the performance measurement of controlling processes as continuous as possible, individual objectives are formulated across processes and KPIs are used that are defined across processes. The following KPIs are used across processes.

IGC-Recommendation

Process goals essential to measure, and doing so is highly recommended by the IGC, are marked with „IGC Recommendation“. The recommended KPIs are presented in KPI boxes.

4.1.1 Fulfilling the customers' needs

With central service providers such as the controller organisation, the main focus is on fulfilling customers' needs. In order to have an outside view on this, regular surveys make sense.

IGC-Recommendation:
Customer satisfaction

As internal clients in practice regard the services of the controller organisation ambivalently („bureaucratic planning“, „flexible reaction to ad-hoc requests“ etc.), it makes sense to break down customer satisfaction to all main controlling processes.

■ **KPI „Customer satisfaction“**

Calculation	Unit
Survey: mean	Scale 1–5 ⁶

Interpretation note:

Customer satisfaction gives an assessment of controlling processes and controller organisation through internal clients. It is assumed that the survey is conducted correctly and biases are avoided.

4.1.2 Adequate use of resources

Note: for capacity and cost KPIs many variations are available (see chapter 2.3). Related to processes, e.g. a differentiation can be made into within/outside the controller organisation (use of resources by controllers or managers) and an overall view (everybody involved in the process). The classification of the controlling processes according to figure 1 provides advice on the usefulness of a differentiated or integrated view.

Absolute and relative use of capacity

Differentiating for internal or external comparisons

Capacity and cost-related KPIs have been chosen so they can continuously be broken down to the individual processes. The absolute capacitative use of resources in FTEs is used for internal comparisons of actual and target values, the relative use of resources can also be used for benchmarking.

⁶ 1...very satisfied, 5...not satisfied at all

■ KPI „Capacity“

Calculation	Unit
FTE	FTE

Interpretation note:

The KPI „capacity“ in its basic form shows the resources available in the respective main controlling process. It can only be made plausible by comparing this with the planned use of resources. Prioritising the use of resources depends on the state of development (e.g. degree of automation) and the company-specific importance of the process.

With this KPI, once again the possibility of having variations of the individual KPIs is shown (see chapter 2.3). Depending on the information needed, it can be useful to differentiate the KPI „capacity“ into, e.g. „capacity“

- focusing on the controller organisation or taking into account management or shared-service capacities
- reduced to central or including decentralised units of the controller organisation
- overall view of the resources used or differentiated by qualification profile within the controller organisation or differentiated by management level in the line organisation
- related to the main process of „controlling“ or differentiated by sub-process of the process model.

■ KPI „Capacity (FTE)”⁷

Calculation	Unit
FTE main controlling process/FTE controller organisation * 100	%

Interpretation note:

The relative share of capacity is an indicator for the efficiency and relative importance of the respective main controlling process. For pragmatic reasons, the KPI is related to the controller organisation, but major shares of output in controlling processes can relate to the management. Measuring this is more difficult, though, and requires a greater measuring effort.

⁷ With relative KPIs, the reference value (the denominator) is shown in brackets in the KPI definition.

4.1.3 Absolute or relative process costs

Cost-related KPIs can be used in addition to capacity-related KPIs. The absolute view of the use of financial resources in EUR is again used for internal comparisons of actual and target values, the relative use of resources (e.g. process costs related to sales) can also be used for benchmarking.

■ KPI „Process costs“

Calculation	Unit
Output-related personnel costs + share in cost of materials	EUR

Interpretation note:

The process costs show the absolute use financial of resources for each main controlling process. There is no allocation to costs neutral to the volume of output. It can only be made plausible by comparing this with the planned use of resources. Prioritising the use of resources depends on the state of development (e.g. degree of automatisisation) and the company-specific importance of the process.

■ KPI „Process costs (sales)“

Calculation	Unit
Process costs (EUR)/sales (EUR) * 100	%

Interpretation note:

See process costs; controlling costs are measured on the level of controlling processes (and are suitable as benchmarks). Relating them to sales provides only limited information if there are volatile price developments.

Process Costing is recommended in spite of disadvantages

Process costing has all the disadvantages of full costing, where costs with little relation to the process are allocated to the processes by means of allocation bases. In this brochure we still recommend measuring process costs, on the one hand restricted to resources directly tied-up in processes, on the other hand, because process management cannot simply leave out the dimension of costs.

If processes are looked at in even greater detail, in several controlling processes cost drivers appear in similar forms:

- Degree of (de-)centralisation in planning processes (number of persons involved in strategy review, operational planning and budgeting, forecasting)

- Degree of detail, number of controlling objects (planning objects in strategy review, operational planning and budgeting as well as forecasting, accounting objects in cost accounting, investments and projects in investment and project controlling and risks in risk management).

In order to keep this brochure focused and clear, no KPIs are presented for these preceding cost drivers.

Cost KPIs can be transferred on main processes

Because of the uniformisation of the dimension of „costs“ across processes, we refrain from a redundant listing under the individual processes. KPIs relevant across processes are thus not presented with the individual processes. However, in the process scorecards in the appendix (see chapter 6) these KPIs can be found.

4.2 Strategic Planning

4.2.1 Brief Description of the Process

Objectives and content

The aim of strategic planning is safeguarding the company's existence and increasing its value on a long-term basis. Strategic planning establishes the basic organisational framework for central corporate decisions. It defines objectives and measures and determines important elements in all major areas. Subjects of strategic planning include markets, products, portfolio, competition, innovations, technology, core competences, and resources.⁸

According to the controlling process model, strategic planning also includes multi-year planning. The strategic component of this process on the one hand relates to regularly reflecting on the content and reworking of the strategy including all projects and measures required for strategy implementation („strategy review“) and on the other hand to providing, purely quantitatively, strategically relevant information („strategic simulation“). Setting up strategic planning initially is not dealt with, as this is to be seen as a project rather than a process.

4.2.2 Process quality

IGC-Recommendation: Full strategy implementation

Strategy implementation is handled by means of strategic initiatives and specific change measures. If strategic measures are agreed upon but not implemented, the company does not succeed in pursuing its strategy consistently. Monitoring strategy implementation thus is a task in the process of strategic planning that is crucial for success.

⁸ see International Group of Controlling (ed.) 2011, p. 23

■ KPI „Degree of strategy implementation“

Calculation	Unit
Planned strategic initiatives (number)/ Implemented strategic initiatives (number) * 100	%

Interpretation note:

The more fully strategic initiatives are implemented, the higher the probability that strategic objectives are achieved (sales, market share, cost, sustainability targets). A high quality of planning is assumed. It must be possible to operationalise strategic objectives to be achieved; project plans safeguard the implementation. As an alternative to a simple measurement of the degree of implementation by means of numbers, a weighting by budget volume or unexpected influences on the result can be made.

Companies in most cases cannot achieve their strategic objectives by continuing their running business („managed base case“). The strategic initiatives mentioned above are intended to close this performance gap. The quality of multi-year planning is ideal when the company manages to completely cover the financial gap between a continued status quo and the strategic objectives with specific measures that can be implemented.

IGC-Recommendation:
Showing a development path

■ KPI „Explanation gap of multi-year planning“

Calculation	Unit
EBIT ⁹ gap not accounted for by measures according to multi-year planning p.a. (EUR)/EBIT (EUR) according to multi-year planning p.a. * 100	%

Interpretation note:

Achieving the milestones set in multi-year planning starts from the running business and must be fully backed with specific measures. The actual implementation of the measures and their effectiveness have to be monitored separately.

Those companies following a sequential planning process (multi-year planning, followed by operational planning and budgeting) additionally have to check whether the actual values really achieve the first milestone of multi-year planning, or it will not be plausible to stick to a long-term development path.

⁹ „EBIT“ is used as an example; the target unit has to be selected depending on what is suitable for the respective company (see chapter 2.3).

4.2.3 Promptness and punctuality

Short planning process Planning processes, and also the strategy review, benefit from tight scheduling. Apart from implementation whose date is fixed in the controlling year planner, it can be sensible to implement outside the schedule (similar to forecasting, see chapter 4.4.3) if there are major internal or external changes. In this case a lean and fast process is advantageous, too.

IGC-Recommendation: Fast simulation results
 Controllers are increasingly asked to provide strategic simulations results in addition to the strategy review and whenever events call for this. In simulations, strategically relevant factors (e.g. market growth, acquisition prices, interest rates) are varied and their effect on aggregated KPIs (e.g. EBIT, equity ratio, cash flow) is analysed. Time pressure for these analyses is very high, as either an ongoing strategy discussion has to be supported or requirements are presented ad hoc.

■ KPI „Lead time“

Calculation	Unit
Working days from start (request) to finish (presentation of simulation result)	WD

Interpretation note:

Management's ability to act is greatly increased if, ad-hoc, required simulation results are provided quickly. It is assumed that this acceleration is possible without a loss of quality (e.g. by reducing idle periods). Central, simulation-relevant factors must have been defined.

Practical hints

...for improving process quality:

- Strategically relevant measures are to be integrated in a measures controlling or programme management, in order to be able to monitor the implementation progress continuously and to take control measures.
- The explanatory value of planning increases with the shift from generic planning that is oriented towards classic controlling objects (e.g. profit centre, cost types, cost objects) to planning that is oriented towards the business model (i.e. value drivers, e.g. number of new customers, fluctuation of existing customers, cross-selling rates,...).
- Comparisons from multi-year planning to multi-year planning show whether development in line with strategy can be proven.

... for improving promptness and punctuality:

- A „strategic radar“ (e.g. monitoring relevant economic, technological or political indicators) shows in time whether it is necessary to check the strategy outside the defined management routines.

- An independent, aggregated planning model makes timely simulations and strategic analyses possible.

... for optimising process costs:

- Multi-year planning is more aggregated and centralised than budgeting.
- Values are carried forward selectively.
- Multi-year planning and strategic simulations are supported by IT.

4.3 Operational Planning and Budgeting

4.3.1 Brief Description of the Process

The aim of operative planning and budgeting is to promote the active and systematic examination of objectives, measures and budgets in the organisational units. It creates an orientation framework for activities and decisions in the short and medium run based on strategic objectives. Targets and measures are determined, resources are allocated and financial parameters are quantified both for the overall company and its individual units. Elements involved include profit and loss account, balance sheet, cash flow, sales, costs, result, investment, projects, volumes, capacities and employees.¹⁰

Objectives and content

4.3.2 Process quality

Planning and budgeting must be related to strategic planning and operationalise the objectives and target values contained in it. The connection between operational and strategic planning can be checked by comparing one or more key benchmark values (e.g. EBIT) to see how much an approved budget diverges from the first milestone of medium-term planning.

IGC-Recommendation: Connection to strategic objectives

■ KPI „Target variance“

Calculation	Unit
$(\text{EBIT approved budget} - \text{EBIT according to year 1 of multi-year planning (EUR)}) / \text{EBIT according to year 1 of multi-year planning (EUR)} * 100$	%

Interpretation note:

The higher the variance between budget and year 1 of multi-year planning, the poorer is the data quality in one of the two plans and the less reliable is multi-year planning. Potential problems occur in the sequential planning of multi-year planning and budget. Variances can arise from external factors and can be avoided by integrating multi-year planning and operational planning.

¹⁰ see International Group of Controlling (ed.) 2011, p. 25

IGC-Recommendation:
High quality and high level target agreements

Target agreements must be realistic and at the same time have a high quality and content level. The aspiration level, the „degree of strain“ of the target values, can be measured in a timely way by comparing the targets contained in the budget with the results according to the latest forecasting. A defensive budget can potentially even be below the forecast, while aggressive targets will clearly exceed what the forecast expected.

■ KPI „Degree of strain“

Calculation	Unit
EBIT budget (EUR)/EBIT forecast (EUR) * 100	%

Interpretation note: The degree of strain is an indicator for the „fitness“ of the budgeted targets in comparison to that forecast on which planning is based. The KPI, however, can also be influenced by external factors. Performance and volumes are therefore the most important basis for planning.

Based on the budget values and the actual data available, it is then ex post possible to see whether the original agreements were realistic and have been achieved.

4.3.3 Promptness and punctuality

IGC-Recommendation:
Short planning process

By shortening the planning processes, both a reduced use of resources and quality improvements are aimed for. Shortening planning allows the company to shift the planning process towards the end of the year, to work with more current data and to make use of more valid forecast data.

■ KPI „Lead time“

Calculation	Unit
Working days from start (planning brief) to finish ((SB) approval)	WD

Interpretation note:

Shortening the planning process increases planning efficiency. It also makes possible a later planning start and thus a more valid starting point for planning. On the other hand, various factors and conditions influence the duration of planning and can so make interpretation more difficult (complexity of the organisation or the transaction, level of detail of planning,...). It is assumed that this acceleration is possible without a loss of quality (e.g. by reducing idle periods).

Reducing the re-working cycles saves costs. Hence it may make sense to check the number of planning loops. A larger number of planning loops are also an indicator for qualitative problems in planning.

Practical hints

... for improving process quality:

- Preparing medium-term planning and budget in coordination safeguards a content link between the time horizons.
- Planning should begin top-down with operational target ideas.
- In order to attain planned goals, budgets are to be backed with measures as comprehensively as possible.
- In order to avoid unrealistic planning, both looking back at past years and scrutinising major divergences from the current forecast are necessary.

... for improving promptness and punctuality:

- A compulsory schedule has to be drawn up, communicated in time to all planning units and monitored by the controllers by means of a status check.

... for optimising process costs:

- A clear separation of decentralised planning activities (e.g. content planning close to the business such as investment planning) and central planning services (e.g. calculating depreciation) lowers the use of resources without loss of quality.
- ABC analysis can be applied to any controlling object (cost types, profit centre etc.) and so assist in finding out in which areas more detail („A“ cost types) or a simpler structure („C“ cost types) may be useful.
- Planning tools help to make seasonal adaptations and carry items forward selectively, as well as to administrate several planning loops.

4.4 Forecasting

4.4.1 Brief Description of the Process

The aim of forecasting is to early on provide information on deviations and variances expected in the future, to develop focused measures to close gaps in targets and, if necessary, to initiate fast adaptations of the sales, cost and investment budgets etc. under changing conditions. In the forecast, the future economic development and its effects on the company as a whole and its individual units are estimated. A forecast can be conducted on both a regular (standard forecast) and an ad-hoc basis.¹¹

Objectives and content

¹¹ see International Group of Controlling (ed.) 2011, p. 28

4.4.2 Process quality

IGC-Recommendation:
Reliability and accuracy

A forecasting process suitable for controlling implies that forecasting is a planning activity. Therefore, the process objectives of forecasting are similar to those in operational planning and budgeting (see chapter 4.3.2).

The quality and reliability of the content of forecasts are essential. With a decreasing planning horizon, the accuracy of the forecast (measured by central benchmarks, such as EBIT) must increase.

■ KPI „Forecast variance“

Calculation	Unit
$(\text{EBIT actual (EUR)} - \text{EBIT forecast (EUR)}) / \text{EBIT forecast (EUR)} * 100$	%

Interpretation note:

Great divergence between actual and the (latest) forecast are an indicator of a lack of both quality and the reliability of the forecast, or massive changes in the environment (trigger for ad-hoc forecasts). In interpreting, external and internal factors influencing the result must be separated.

Company-specific frequency

Due to the required use of resources in preparing the forecast, it cannot automatically be implied that increasing the frequency (e.g. change from quarterly to monthly forecasting) has a positive cost-benefit relation in corporate control. It is useful to adapt the forecast frequency to the control requirements of the organisation. The more volatile a company is in its development, or the tighter its profit situation, the more frequently forecasts will be needed.

4.4.3 Promptness and punctuality

IGC-Recommendation:
Short forecasting process

As the standard forecast is integrated into the reporting processes of the company, there is a lot of time pressure. It is important to be able to react fast to new information and requirements, based on the actual data.

■ KPI „Lead time“

Calculation	Unit
Working days from start (according to schedule) to finish (presentation of forecast result)	WD

Interpretation note:

Management's ability to act increases if the forecast is presented quickly within management reporting. Various factors and conditions influence the duration of forecasting (level of detail, degree of (de) centralisa-

tion,...) and can so make interpretation more difficult. Furthermore, it is assumed that acceleration is possible without a loss of quality (e. g. by reducing idle periods).

Practical hints

... for improving process quality:

- Forecast results should be compared over time.
- Adapting forecast dates to company-internal requirements (e.g. forecast always in the trough of a seasonal curve) can increase the results' validity.

... for improving promptness and punctuality:

- More centralisation in preparing forecasts and selectively carrying forward items speed up forecasting and lower process costs.

... for optimising process costs:

- Critical factors that influence results must be identified in order to be able to avoid unnecessary planning detail.
- Value-driver based planning creates opportunities for simplifying forecasting by using a reduced set of value drivers.

4.5 Cost Accounting

4.5.1 Brief Description of the Process

The aim of cost accounting is to create transparency by correctly allocating costs, outputs and revenues to the relevant objects (e.g. products, product groups or business units) in order to support decisions. Cost accounting deals with recording, distributing, allocating, analysing and checking costs, outputs and results that emerge when goods are used up or produced in a company.¹²

Objectives and content

4.5.2 Process quality

Cost accounting has to meet high standards, as it is expected to deliver „objectively“ correct results. For this, correct cost type and cost centre accounting as a form of responsibility accounting, as well as detailed cost object accounting are required. Particularly important are a high quality of forecasts in preliminary calculation and extensive, timely and correct actual calculation. Only by consistently applying accompanying and ex-post calculation can the company draw conclusions for both concluded and future transactions. Cost accounting shares this challenge with project and investment controlling (see chapter 4.7.2).

IGC-Recommendation: Identifying sources of success/failures

¹² see International Group of Controlling (ed.) 2011, p. 30

■ KPI „Quality of prognosis“

Calculation	Unit
Average [(CM actual calculation (EUR) – CM preliminary calculation (EUR))/CM (EUR) preliminary calculation * 100]	%

Interpretation note:

The „quality of prognosis“ is an indicator for the quality in preliminary calculation and implies the obligatory use of actual calculation. Moreover, standard marginal costing is a prerequisite. It must also be noted that variances can also arise from external influences (e.g. unforeseen development of acquisition prices). The KPI can also be applied to other elements of cost accounting (e.g. cost centres, cost object accounting).

Additionally, during actual calculation the degree of coverage of preliminary calculation can be measured explicitly.

Relevant results The results of cost accounting are also used as a basis for making decisions by managers on subsequent levels. The relevance of the cost accounting results for individual managers depends on whether the costs shown and allocated in the report can be controlled. It is important that the report contents and responsibility structures („controllable costs“) are congruent.

Harmonising valuations Due to the increasing harmonisation of internal and external accounting, approaches based on imputed valuations are becoming less and less important. As harmonisation efforts, i.e. the alignment of imputed valuations and valuations in accounting, can take place over a longer period of time, it is useful to check the (decreasing) development of the differences. On the day a company stops using imputed valuation approaches, the process objective is achieved and no further measurement is required.

4.5.3 Promptness and punctuality

IGC-Recommendation: Timely preparation The results of cost accounting are part of standard reporting and thus subject to the time pressure of reporting. Timely calculations and preparation of the results during the period's accounts are therefore required.

■ KPI „Lead time“

Calculation	Unit
Working days from start (finishing accounts in external accounting) to finish (presentation cost accounting report)	WD

Interpretation note:

Management's ability to act increases if the cost accounting reports are provided in time. It is assumed that acceleration is possible without a loss of quality (e.g. by reducing idle periods). In order to achieve significant acceleration, preceding systems (e.g. recording company data) are to be included in the optimisation.

Apart from the monthly standard accounting procedure, the fast availability of ad-hoc calculations is also important.

IGC-Recommendation:
Fast availability

■ KPI „Response time“

Calculation	Unit
Working days from start (request) to finish (presentation of calculation)	WD

Interpretation note: the sooner calculation results are available, the higher the benefit from using cost accounting in the operative business. In order to be able to prepare timely calculations, data from preceding systems must be available in time.

Practical hints

... for improving process quality:

- Preliminary and actual calculations should be made compulsory in the organisation („no transaction without calculation“).
- Targets and templates for calculations should be standardised whenever possible.
- Calculation approaches (e.g. hours performed, acquisition prices, interest rates) have to be kept up-to-date.
- Distinguishing „controllable“ and „non-controllable“ costs types of the respective management level furthers taking responsibility for financial results.
- External accounting has to provide results on an accrual basis so that these can be used for controlling without any changes.

... for improving promptness and punctuality:

- Internal cost allocation is time-critical. The process can be accelerated by coordinating the content only after making the entry and any corrections required are made in the subsequent period.
- Time records are to be kept up to date.
- Value and volume flows are to be depicted integrated in an ERP-System.

... for optimising process costs:

- An ABC analysis related to accounting objects is suitable to make the level of detail used plausible.
- Cost allocation should be automated as much as possible.

4.6 Management Reporting

4.6.1 Brief Description of the Process

Objectives and content Management reporting delivers information relevant for decision-making in the sense of relation to objective/degree of goal attainment, in a recipient-oriented and timely manner for the control of the company. Financial and non-financial information in the dimensions Actual, Actual previous year, Planned, Target and Forecast is provided in the form of regular standard reports as well as ad-hoc reports. Based on variance analyses and prognoses on goal attainment, specific recommendations for countermeasures are worked out with the management. Relevant elements include, amongst other things, profit and loss account, balance sheet, cash flow, sales, costs, result, investment, projects, volumes, capacities and employees, related to the management units in the company.¹³

4.6.2 Process quality

Supporting decisions and defining measures Controllers have to transport relevant information to the management in order to support decision-making and to initiate measures that improve the results. A merely quantitative increase in reports and report pages does not automatically increase the benefit for the controllers' clients. Both relevance and quality of a report's content influence the report's rate of use. Reports the management does not use regularly are to be scrutinised. Voluminous reports, intended to be reference works, are in most cases used only infrequently and have to be streamlined.

Learning from mistakes Quality requirements in reporting are on the one hand set at a high level by the report recipients; on the other hand the controller's professional ethos strives for the presentation of flawless reports. Errors are mainly seen as an opportunity to learn and avoid making the mistakes again.

IGC-Recommendation: Partnering Reports provide the highest benefit when their content is discussed between managers and controllers, i.e. a „partnering“ takes place and measures to improve results are derived from this. The more intense the discussion is the better the positioning of the controller organisation and the stronger the partnering between controllers and managers.

■ KPI „Intensity of discussion“

Calculation	Unit
Coordination between report recipients and controllers	Hours

¹³ see International Group of Controlling (ed.) 2011, p. 33f

Interpretation note:

Via the intensity of discussion, the intensity of cooperation between report recipients and controllers is made plausible. Estimating the KPI for the objectification of positioning the controller organisation is sufficient. A high intensity of discussion can indicate an intensive partnering between managers and controllers, but also flawed reports or bad data quality.

A broadly automated preparation of the standard reports creates, mainly in the controller organisation, capacity for analysing and interpreting the report content. This in turn increases the quality of partnering between controllers and the management.

Reducing manual intervention

4.6.3 Promptness and punctuality

The management expects timely and punctual information. As there are interdependencies between promptness and costs (e.g. costs of automation, overtime, capacity increases), it has to be determined when inputs for timely control are needed. When reporting is accelerated, it must be ensured that the reports are in fact used in a timely manner. Dates that have been communicated must be adhered to 100 %.

IGC-Recommendation: Punctual and timely information

■ KPI „Punctuality“

Calculation	Unit
Standard reports presented on agreed date (number)/total reports (number) * 100	%

Interpretation note:

Punctuality is an indicator for the reliability of the reporting schedule, but can also hint at potential resource bottlenecks in the reporting process or the preceding systems.

■ KPI „Lead time“

Calculation	Unit
Working days from start (end of month) to finish (finishing the standard report)	WD

Interpretation note: management's ability to act increases if information is provided in a timely manner. It is assumed that acceleration is possible without a loss of quality (e.g. by reducing idle periods). In order to achieve significant acceleration, preceding systems (e.g. financial accounting) are to be included in the optimisation.

Practical hints

... for improving process quality:

- A change in top management provides an opportunity to streamline reporting.
- The intensity of use of the reports is to be checked annually.
- Reporting tools provide relatively easy access to reports, but it should be remembered that „self-controlling“ by the management can in no way replace partnering with the controllers.
- Quality circles that include the data suppliers help to reduce mistakes.

... for improving promptness and punctuality:

- A reporting schedule has to be drawn up and communicated. Dates must be set realistically so that they can be kept every month.
- Reporting processes are generally suitable for benchmarking. This makes it possible to include external comparative values in the acceleration procedure.

... for optimising process costs:

- Unused reports are to be eliminated.
- Individual client needs can be covered through pre-configured, retrievable variants of standard reports.
- A central database and a professional planning and reporting tool are an important prerequisite for data quality and lowering the process costs.

4.7 Project and Investment Controlling

4.7.1 Brief Description of the Process

Objectives and content Project and investment controlling creates transparency regarding benefit, results and profitability, as well as adherence to quality, time and cost targets of projects and investments. The controlling process supports in evaluating, prioritising and selecting, in planning, in implementing and controlling, as well as in checking goal attainment after finishing projects and investments.¹⁴

No differentiation

In analogy to the controlling process model, for pragmatic reasons, there is no differentiation between projects and investments.

4.7.2 Process quality

IGC-Recommendation:
Binding capital investment analyses Assumptions and plans in connection with project and investment decisions must be binding. Only in exceptional cases (e.g. identical replacement investment, small investments below a limit defined depend on the company) should decisions be made without capital investment analysis. The KPI „degree of coverage“ can check whether this is the case.

¹⁴ see International Group of Controlling (ed.) 2011, p. 36

■ KPI „Degree of coverage“

Calculation	Unit
Projects (investments) without capital investment analysis (number)/approved projects (investments) total (number) * 100	%

Interpretation note:

The higher the degree of coverage with capital investment analyses, the more investment decisions are made on a quantified basis. The KPI measures whether a capital investment analysis is made, so the quality of the capital investment analysis has to be dealt with separately.

Already during the run of the project or investment it must be constantly checked how the venture is developing in relation to the preliminary calculation.

IGC-Recommendation:
Reliability of cost or return forecast

■ KPI „Quality of prognosis“

Calculation	Unit
Projects (investments) at actual costs better than or equal to budget (number)/projects (investments) total (number) * 100	%

Interpretation note:

The quality of prognosis is an indicator for the quality of the capital investment analysis and presupposes a compulsory project calculation (capital investment analysis) and its assessment ex-post. Limiting the KPI to important projects can be useful. The comparability of preliminary and actual calculation can be limited due to e.g. project additions or the lack of available historical data in long-running investment ventures.

After completing projects or investments, a final actual calculation has to be made to be able to finally evaluate the project and draw conclusions for similar future ventures.

IGC-Recommendation:
Learning from completed projects

■ KPI „Degree of coverage actual calculation“

Calculation	Unit
Projects (investments) with actual calculation (number)/projects (investments) calculated total (number) * 100	%

Interpretation note:

Only if an actual calculation has been made it is possible to identify sources of success (failure) and to learn from a miscalculation. The KPI measures whether actual calculations are made. In addition, the comparability of preliminary and actual calculation as regards content has to be taken into account.

4.7.3 Promptness and punctuality

IGC-Recommendation:
Fast decision-making

Decisions not relating to the day-to-day business are often postponed. The length of the decision-making process is here not the controller's responsibility. The controller makes sure that project or capital investment analyses are available in time.

■ KPI „Lead time“

Calculation	Unit
Average working days from start (request of capital investment analysis) to finish (presentation of capital investment analysis)	WD

Interpretation note:

The management's ability to act increases through the timely provision of capital investment analyses and business cases. The lead time can be less relevant than in operative processes due to the predominantly content-driven nature of the process.

Practical hints

... for improving process quality:

- Project and investment-related preliminary and actual calculations must be made compulsory in the organisation.
- A specific calculation scheme (calculation method and calculation sheet) and central parameters (e.g. interest rates, maximum amortisation periods) have to be set centrally.
- Projects and investments are to be integrated into the P&L, balance-sheet and cash-flow development. Only in this way can the claim of multi-year planning, i.e. to explain the closing of performance gaps, be kept up (see chapter 4.2.2).
- Variances resulting from misjudgements in the premises should be distinguished from internally caused variances.
- Actual calculations should be repeated in necessary (e.g. following the end of the construction phase, again during the operating phase), in order to be able to check the „business case“ as a whole.

... for improving promptness and punctuality:

- A decentralised preparation of decision-making and a central checking and selecting function must be clearly distinguished.

... for optimising process costs:

- Reducing the level of detail lowers the process costs, but it has to be kept in mind that also content aspects (e.g. strategic relevance, degree of innovation or sensitivity of the venture) can be the reason for conducting a monitoring, irrespective of the project volume.
- Smaller ventures should be supported by a simplified controlling process.

4.8 Risk Management

4.8.1 Brief Description of the Process

The aim of risk management is to safeguard the firm's long-term existence and to improve the quality of planning by identifying and controlling early on positive and negative influences on the company value. Risk management includes identifying, recording, analysing, evaluating and checking risks, as well as deriving and implementing suitable risk prevention measures. This is to be achieved within the framework of established risk policy and strategic orientation.¹⁵

Objectives and content

Pay attention to risks and opportunities

The term „risk management“ used refers to the management of opportunities and risks alike.

4.8.2 Process quality

„Risks“ are the distribution around a target value (e.g. EBIT). An effective risk management results in this distribution decreasing over time. Ex post the quality of risk management can be measured by checking whether the EBIT realised really was within the corridor provided by the previous risk forecast or how much it finally diverged from the most probable value.

IGC-Recommendation: Accurate quantification

■ KPI „Risk variance“

Calculation	Unit
$(\text{Actual result (EBIT, EUR)} - \text{probable result according to risk management (risk adjusted EBIT, EUR)}) / \text{risk adjusted EBIT (EUR)} * 100$	%

¹⁵ see International Group of Controlling (ed.) 2011, p. 39

Interpretation note:

The better risk management works, the lower the variance from the result actually achieved. A prerequisite of this KPI is that the aggregation of the effect of risks on a top KPI is available. The quality of risk management also depends on the cooperation of managers (risk owners) and risk controllers.

IGC-Recommendation:
High transparency

When risks have become effective, it has to be evaluated whether these risks had been known before. The occurrence of risks not included in the risk catalog must be seen critically, as in this case the risk management system has failed. The aim must be that no unknown risks occur.

■ KPI „Degree of risk identification“

Calculation	Unit
EBIT-actual influence (risks identified, EUR)/EBIT-actual influence (all risks occurring, EUR) * 100	%

Interpretation note:

Independent of the risk-opportunity strategy, the highest possible degree of identification is to be aimed at. For the risk owners' influence, see above.

Effective measures to handle risks

Measures to handle risks limit the distribution around a target value and so secure a certain level of income. The riskiness of the business is actively influenced. The effect of identified risks on the result should with an effective risk management system decrease over time.

4.8.3 Promptness and punctuality

IGC-Recommendation:
Timely and punctual information

In analogy to process management reporting (see chapter 4.6.3), information from risk management also has to be provided in a timely and punctual fashion in order to support the management's ability to act.

■ KPI „Punctuality“

Calculation	Unit
Risk reports presented on the agreed date (number)/risk reports total (number) * 100	%

Interpretation note:

Punctuality is an indicator for the reliability of the reporting schedule, but can also indicate resource bottlenecks in the risk management process or insufficient cooperation between risk owners and controllers.

Practical hints

... for improving process quality:

- A centrally devised risk catalog ensures a uniform reference framework for risk identification.
- If risks cannot be quantified using historical data, expert estimates are to be used.
- The effects of risks and opportunities have to be related to a target value and aggregated (e.g. „risk-adjusted EBIT“), in order to give an overall picture.
- The risk catalog has to be reviewed annually.

... for improving promptness and punctuality:

- By integrating the top KPI of risk management (e.g. „risk-adjusted EBIT“) into the controlling report, a bridge to risk reporting is established.

... for optimising process costs:

- Risk catalogs are often too extensive. The risk catalog can at first include the major risks and, following the first experience, grow gradually depending on requirements.

4.9 Function Controlling

According to the controlling process model, function controlling is defined as follows: „Function controlling is the controlling of the individual functions in the value-creation chain, such as R&D, production, distribution (primary activities) or personnel and IT (support activities).“¹⁶ The scope and importance of individual function-specific controlling processes varies from company to company. Generally, a function-specific controlling process has the same aims as the cross-function controlling processes already shown. An R&D planning process thus also has to achieve quality, time and cost targets (e.g. challenging target agreements, short lead times, adequate use of resources).

Objectives and content

The process KPIs for measuring the performance of all main controlling processes are therefore also relevant for function controlling processes such as R&D, procurement, production, logistics, distribution, marketing, personnel, service, IT, quality, group controlling, etc. and will not be described again. Some individual function-specific objectives and KPIs (e.g. reducing the flop rate through R&D controlling) enable comprehensive performance measurement of these processes.

Relevant process KPIs

¹⁶ quoted from International Group of Controlling (ed.), Controlling-Prozessmodell, Freiburg 2011, p. 41

4.10 Management Support

4.10.1 Brief Description of the Process

Objectives and content

The aim of management support by controllers is coordinating across departments and ensuring the rationality of decisions within the management process of setting objectives, planning and control. Controllers design the main controlling processes and, as service providers make sure that these are used in the company. As the management's „sparring partners“ and „business conscience“ they assist by providing useful tools and information relevant for decisions, show the effects of alternative actions and create transparency across departments relating to strategy, result, finances and processes.¹⁷

4.10.2 Process quality

IGC-Recommendation:
Business know-how

A sufficient penetration of management with business know-how facilitates the service provision by controllers and enables internal clients to better interpret controlling results and deduce decisions and actions from them. It is important for controllers to be present in internal trainings in order to provide the controlling clients with (company-) specific knowledge.

■ KPI „Degree of penetration business know-how“

Calculation	Unit
Staff and line functions with business qualification (headcount)/Staff and line functions total (headcount) * 100	%

Interpretation note:

To interpret controlling reports correctly and use them in decisions, it is necessary for the decision-makers to show business competence. In order to measure the KPI, some organisational restrictions have to be made (e.g. analysis up to the xth management level including people responsible for projects). In addition, separating primary and secondary (e.g. through internal training) qualification is sensible.

IGC-Recommendation:
Partnering

The controller's mission statement strongly propagates partnering, i.e. the active cooperation between management and controllers. Companies that allow and promote partnering actively integrate controllers in the standard meeting routines and decision-making bodies, but also major projects. The intensity of the controllers' participation in decision-making processes allows drawing conclusions as to their acceptance.

¹⁷ see International Group of Controlling (ed.) 2011, p. 45

■ KPI „Involvement in change projects“ (FTE)

Calculation	Unit
FTE controllers in change projects/FTE controller organisation * 100	%

Interpretation note:

The extent of including the controllers in change projects allows the measurement of the intensity of active cooperation with the business and measures the importance the support of change projects has in the controller organisation. The benefit of the change projects and the extent of controller participation required have to be evaluated separately.

Moreover, the inclusion of the controllers in the management routines (participation rate, share in the „conversation“) should be at least estimated, so that the scope of the interaction between controlling and management can be made more objective as a whole.

Meeting the clients' needs is relevant in all controlling processes, but particularly in management support. A high degree of interaction between controllers and managers makes it possible to create perceivable benefits, also from the point of view of the controller clients. For details on the KPI see chapter 4.1.

Meeting the clients' needs

4.10.3 Promptness and punctuality

The controllers' clients expect timely support in ongoing business routines, but also with individual requests. It is thus important to have the resources of the controller organisation available in time.

IGC-Recommendation:
Fast availability

■ KPI „Lead time answering requests“

Calculation	Unit
Average working days from start (ad-hoc request) to finish (provision of data relevant for decision-making)	WD

Interpretation note:

Management's ability to act increases if ad-hoc requests are answered quickly. It is assumed that acceleration is possible without a loss of quality (e.g. by reducing idle periods). How long it takes to answer the request depends both on the available capacity, the business-specific know-how at hand and the IT-supported access to the data.

Practical hints

... for improving process quality:

- Controlling and business know-how can be conveyed to top-management functions in individual coachings (e.g. business cases) tailored to their specific needs.
- A jour fixe between the head of the controller organisation and the managers furthers cooperation.
- Controllers are to be included in decision-making processes in a focused manner.

... for improving promptness and punctuality:

- Through a broad know-how base and substitutions, a high-quality and timely servicing of management can be ensured.

... for optimising process costs:

- Personal services are focused on top clients. It must be clearly defined from which hierarchical level downward controlling matters are to be transferred to the line organisation and office-holder increasingly gather information themselves.

4.11 Enhancement of Organisation, Processes, Instruments and Systems

4.11.1 Brief Description of the Process

Objectives and content

The controlling processes, instruments and systems used in the company, as well as the controller organisation, are to be developed continuously. In particular, it has to be examined which processes have to be adapted, which processes could be dropped and which areas have to be developed in general in order to increase efficiency and effectiveness. The process of enhancement of organisation, processes, instruments and systems also includes moderation, knowledge transfer, support and training/qualification of employees inside and outside the controller organisation.¹⁸

4.11.2 Process quality

IGC-Recommendation:
Structured enhancement

The enhancement of controlling processes, instruments and systems, as well as the controller organisation, is handled mainly by the controllers themselves. In order to detect opportunities for optimisation, existing processes must be analysed for required adaptation in regular reviews. On this basis, competitive controlling processes can be developed and implemented.

¹⁸ see International Group of Controlling (ed.) 2011, p. 46f

■ KPI „Scope of process optimisation“

Calculation	Unit
Optimised controlling processes in the last 2 years	Number

Interpretation note:

The 10 main controlling processes are to be checked continuously for covering the current control requirements and optimisation potentials and, if necessary, have to be adapted appropriately. It has to be kept in mind that the KPI includes heterogeneous development measures (e.g. new planning concept, introduction of software). For pragmatic reasons, measures are not weighted.

Controllers demand the performing units of the company to orient themselves towards the outside. Also for the controlling processes themselves it is useful to make external comparisons, temporarily by means of benchmarking, in order to be able to assess the development status.

Competitive processes

4.11.3 Promptness and punctuality

For the enhancement of controlling, a prioritised, scheduled and coordinated approach is required. In contrast to operational processes, however, speed is in most cases not a major aim. Still, it is important how long it takes from recognising the relevance of a new controlling instrument or idea to implementing a controlling instrument that can be used in the company.

IGC-Recommendation: Short implementation period

■ KPI „Time to market“

Calculation	Unit
Months from start (recognising the relevance of an instrument) to finish (first use)	Months

Interpretation note:

If a development is recognised as relevant, it should be implemented as fast as possible in order to generate the desired benefit soon. Whether improvement measures can be implemented may be outside the controllers' sphere of influence, depending on the management's approval or approval of the budget.

4.11.4 Process costs

Investment
in enhancement

Additionally to the resources used in the process or the controller organisation, investments in enhancement can be used to check how open the company and the controller organisation are for innovation.

Practical hints

... for improving process quality:

- Appointing new employees to open positions in line with target profiles is essential for the quality of the controller organisation's services.
- Platforms of the controlling community, specialist media etc. make it possible to detect new developments in time and check these for use in the company.
- The management must be actively included in change projects to safeguard support and acceptance for enhancement.
- If a quality management system already exists in the company, it has to be checked in how far the advantages of integrating the controlling processes into this quality management system (e.g. making use of documentation standards) outweigh potential drawbacks (e.g. high documentation and auditing effort with full integration).

... for improving promptness and punctuality:

- With benchmarking it is advisable not to define the partners selected for comparison too narrowly, mainly in management and support processes. Restricting the analysis to comparable company size or the same industry reduces the perspective.

... for optimising process costs:

- In order to monitor the degree of innovation, not only new instruments are to be taken into account. Optimising the basic processes (e.g. reorganisation of planning processes) is also a major enhancement.
- A qualitative evaluation of the IT systems, interfaces and the degree of integration makes divergences from the ideal solution visible.
- Innovation circles promote the exchange between controllers and line functions. Customer requirements can be actively taken into account in the enhancement of the organisation, processes, instruments and systems.

4.12 KPIs for the Controller Organisation

Comprehensive performance measurement, besides measuring performance in individual processes, has to allow for measuring performance in the controller organisation.

4.12.1 Process quality

IGC-Recommendation:
Top qualification
of controllers

As a know-how intensive service provider, the qualification of resources is significant for service quality and innovation. In order to pursue qualification objectives, it is thus at least necessary to measure investment in trainings.

■ KPI „Intensity of training“

Calculation	Unit
Trainings (days)/FTE controller organisation total	Number

Interpretation note:

Training activities increase the controllers' qualification (hypothesis). As an indirect measurement that is timely and simple, the KPI does not allow any direct conclusions as to the qualification that can be made use of. Alternatively, direct and impact-oriented measurement can be effected by means of staff evaluation (target profiles and their step-by-step improved realisation).

In order to be a sparring partner for the management, it is necessary, besides excellent qualifications in the subject, to have enough job experience to gain a profound understanding of the respective business.

A stable controller organisation enables continuous provision of service at a high quality level. Labour turnover measures the (in) stability ex post.

IGC-Recom-
mendation:
Stable controller
organisation

■ KPI „Labour turnover“

Calculation	Unit
Employees leaving unplanned (number)/employees (average number) * 100	%

Interpretation note:

Labour turnover represents the outflow of know-how and, at least temporarily, inefficiencies in the controlling processes. Up to a certain degree, labour turnover can also have a positive effect, as know-how can be supplemented from outside.

Surveys on employee motivation take place earlier in the process than indirect measurement of the turnover and give the head of the controller organisation the opportunity to set countermeasures to negative developments.

4.12.2 Promptness and punctuality

Measuring promptness and punctuality does not make sense at the level of an organisational unit and therefore takes place via the individual main controlling processes.

4.12.3 Process costs

Despite high quality requirements it is essential to monitor costs constantly, possibly supported by external benchmarks. The costs of the controller organisation should be at least „competitive“, i.e. it should be

IGC-Recommendation:
Adequate use of resources

able to make them plausible in a benchmark comparison. A discussion of controller costs in most cases takes place in an organisational context – centralisation vs. decentralisation of controller activities – (see chapters 4.2, 4.3, and 4.4).

■ KPI „Capacity“

Calculation	Unit
FTE	FTE

Interpretation note:

Capacity shows the resources available in the controller organisation. It can be made plausible by comparing this with the planned use of resources.

■ KPI „Process costs (sales)“

Calculation	Unit
Process costs controller organisation (EUR)/sales (EUR) *100	%

Interpretation note:

Process costs related to sales show the efficiency of the controller organisation (at a constant qualitative result/effectiveness). Costs for materials and external services and non-allocated internal costs (e.g. costs of relevant IT systems) have to be taken into account. Relating them to sales provides only limited information if there are volatile price developments.

Practical hints

... for improving process quality:

- Controllers need to have business-related know-how. This know-how can be created by means of trainee programmes or by integrating employees from decentralised units.
- In order to ensure service quality and stability in the controller organisation, a distinction can be made in the development perspectives of controllers between „consultants to management“ and „experts“ for defined controlling topics and instruments. Experts provide continuity in the controller organisation; consultants offer the best support possible for the management.
- The permanent availability of services for the management must be ensured by means of substitutions.

... for optimising process costs:

- Selectively centralising controller activities can cut costs without any loss of quality if, at the same time, customer-orientation is held up („business partner model“).

5 Conclusion

Controllers call for process transparency in the companies and actively assist in creating it. This holds true mainly for processes along the value-added chain, but the development status of an active management of the controlling processes themselves still seems underdeveloped. A current survey by the Austrian Controller Institute shows that in only 13 % of companies interviewed controlling processes are managed by means of process KPIs.¹⁹

Current state of process management

For this reason, the IGC supports two initiatives that offer an improvement in controlling performance: first, the process model that also underlies this brochure provides a standard map of controlling processes and so supports a common controlling terminology. Second, the results of IGC's „controlling process KPIs“ working group make specific suggestions for measuring performance in controlling processes. In order to combine the content of the KPIs and the processes, process objectives and requirements from performing controlling processes are formulated in the dimensions of quality, time and costs. The results can be directly applied for critical reflection in the companies. The process KPIs can be used across sectors and independently of a particular company's individual conditions and environment. Within the scope of this brochure, though, it is neither possible nor sensible to give specific target values. These have to be set by the respective companies.

Active design of controlling processes

On the basis of uniformly structured controlling processes and the key performance indicators presented, companies can more easily gain a differentiated picture of their own controlling processes, both in critical self-analysis and in an exchange relationship with other companies, and to detect need for action.

Benchmarking

Based on the results presented here, controlling processes can be optimised further. The performance benchmarks, for instance, can be linked with MbO and incentive systems. Finally, the concept of performance measurement outlined in this brochure can also be extended towards specific service agreements between controllers and their clients that include specifying the individual criteria for providing services (service level agreements).

Future extension

Companies, driven by external and internal influences, are changing constantly, sometimes also discontinuously. Within this overall change process, a solid system of performance measurement becomes an important instrument for actively designing the controlling processes and the controller organisation.

¹⁹ see Waniczek 2012, p.27

6 Appendix – Scorecards of the Controlling Processes

Strategic Planning (Strategy Review)			
Quality			
Process-related objectives	KPI	Calculation of KPI	Unit
IGC consistent implementation of strategy	→ degree of strategy implementation	planned strategic initiatives (number) / implemented strategic initiatives (number) * 100	%
IGC identifying a development path over several years incl. indication of financial performance gaps to be closed (gap closing)	→ explanation gap	EBIT gap not accounted for by measures according to multi-year planning p.a. (EUR) / EBIT (EUR) according to multi-year planning p.a.* 100	%
	→ degree of goal attainment	EBIT actual (EUR) / EBIT milestone year 1 of multi-year planning (EUR) * 100	%
fulfillment of customer needs	→ customer satisfaction	survey: mean	Scale 1-5
Time			
Process-related objectives	KPI	Calculation of KPI	Unit
short strategic planning process	→ lead time	working days from start (according to schedule) to finish (presentation of strategy review)	WD
IGC timely information of simulation result	→ lead time	working days from start (request) to finish (presentation of simulation result)	WD
Costs			
Process-related objectives	KPI	Calculation of KPI	Unit
IGC adequate use of resources	→ capacity	-	FTE
IGC	→ capacity (FTE)	FTE strategic planning (strategy review) / FTE controller organisation * 100	%
	→ process costs	output-related personnel costs + share in cost of materials	EUR
	→ process costs (sales)	process costs strategic planning (strategy review) (EUR) / sales (EUR) * 100	%
	→ process costs (FTE)	process costs strategic planning (strategy review) (EUR) / FTE total	EUR

Frq - Frequency (suggestion): m - monthly, q - quarterly, a - annually, ad - ad hoc; BM - suitable as benchmark

Fig. 4: Process scorecard strategic planning (strategy review)

Controlling Process KPIs

Significance	Interpretation note	Frq	BM
the more fully strategic initiatives are implemented, the higher the probability that strategic objectives are achieved (e.g. sales, market share, cost, and sustainability targets)	high quality of planning is assumed; strategic objectives to be reached need to be operationalised; project plans ensure implementation; as an alternative to measuring the degree of implementation in terms of numbers, budget volumes or expected influence on results can be weighted	a	
achieving the milestones set in multi-year planning starts from the running business and must be fully backed with specific measures	the actual implementation of measures as well as their effectiveness need to be monitored separately	a	x
checking whether the first milestone of multi-year planning has been achieved	only relevant if multi-year planning and budget are planned sequentially; actual implementation of measures has to be checked separately	a	x
satisfaction of internal clients with the strategy review; 1 ... very satisfied, 5 ... very dissatisfied	assumption: survey is conducted correctly (e.g. avoidance of distortions, bias)	a	
Significance	Interpretation note	Frq	BM
increasing the efficiency of strategic planning by shortening the planning process; easier to repeat planning if the situation requires it	it is assumed that this acceleration is possible without a loss of quality (e.g. by reducing idle periods). Because the process is mainly content-oriented, lead time is sometimes less relevant than lead time in operative processes	a	x
management's ability to act is greatly increased if, event-driven, required simulation results are provided quickly	it is assumed that acceleration is possible without a loss of quality (e.g. by reducing idle periods). Central, simulation-relevant factors must have been defined	ad	x
Significance	Interpretation note	Frq	BM
resources available in strategic planning	can only be made plausible by comparison with the planned use of resources; prioritising the use of resources depends on the state of development (e.g. degree of automatisisation) and the company-specific importance of the process	a	
indicator for the efficiency and relative importance of strategic planning	part of the output in the process is outside the controller organisation (reduced measurability and higher measurement effort required)	a	x
absolute use of financial resources for strategic planning	see capacity; no allocation to costs neutral to the volume of output; can only be made plausible by comparison with the planned use of resources; prioritising the use of resources depends on the state of development (e.g. degree of automatisisation) and the company-specific importance of the process	a	
efficiency of controlling process (with identical qualitative output / effectiveness); breaking down controlling costs to the controlling processes that is suitable for benchmarking	see process costs; relating these to sales provides only limited information if there are volatile price developments	a	x
analogous to process costs (sales)	see process costs	a	x

Controlling Process KPIs

Operational Planning and Budgeting				
Quality				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	compatibility with strategic planning / operationalises strategic targets	→ target variance	(EBIT approved budget - EBIT year 1 of multi-year planning (EUR)) / EBIT year 1 of multi-year planning (EUR) * 100	%
IGC	challenging quality targets	→ degree of strain (forecast)	EBIT budget (EUR) / EBIT forecast (EUR) * 100	%
		→ budget variance	(EBIT actual (EUR) - EBIT budget (EUR)) / EBIT budget (EUR) * 100	%
	fulfillment of customer needs	→ customer satisfaction	survey: mean	Scale 1-5
Time				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	short planning process	→ lead time	working days from start (planning briefing) to finish (board approval)	WD
		→ planning loops	-	number
Costs				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	adequate use of resources	→ capacity	-	FTE
IGC		→ capacity (FTE)	FTE operational planning and budgeting / FTE controller organisation * 100	%
		→ process costs	output-related personnel costs + share in cost of materials	EUR
		→ process costs (sales)	process costs operational planning and budgeting (EUR) / sales (EUR) * 100	%
		→ process costs (FTE)	process costs operational planning and budgeting (EUR) / FTE total	EUR

Frq - Frequency (suggestion): m - monthly, q - quarterly, a - annually, ad - ad hoc; BM - suitable as benchmark

Fig. 5: Process scorecard operational planning and budgeting

Controlling Process KPIs

Significance	Interpretation note	Frq	BM
the higher the variance between the budget and year 1 of the multi-annual plan, the poorer is the quality of the data in one of the two plans, the less reliable is the multi-annual plan	only relevant in case of sequential planning; high variance can only be avoided if multi-year planning is integrated with operational planning; external influences are to be considered	a	x
"fitness" of the budget targets, measured ex ante	budget in relation to the forecast on which planning is based; relations to results and volumes constitute the most relevant bases for planning; influence of external factors needs to be considered	a	x
measured ex post; high variance between actual and budget indicate poor planning quality and reliability	variance can also be triggered by major changes in the environment and can limit the interpretation of the KPI	a	x
satisfaction of internal clients with the operational planning; 1 ... very satisfied, 5 ... very dissatisfied	assumption: survey is conducted correctly (e.g. avoidance of distortions, bias)	a	
Significance	Interpretation note	Frq	BM
increasing planning efficiency by reducing the length of the planning process; reducing the length of the planning process permits a later starting date and hence a more valid starting point	diverse factors and conditions influence duration of planning (complexity of the organisation or the business, degree of planning detail,...); assumes that lead time can be shortened without an associated decrease in quality (e.g. by reducing idle times)	a	x
the necessity of several planning cycles lengthens the lead time and indicates that planning is fraught with quality problems	see lead time	a	x
Significance	Interpretation note	Frq	BM
resources available in operational planning	can only be made plausible by comparison with the planned use of resources; prioritising the use of resources depends on the state of development (e.g. degree of automatisisation) and the company-specific importance of the process	a	
indicator for the efficiency and relative importance of operational planning	part of the output in the process is outside the controller organisation (reduced measurability and higher measurement effort required)	a	x
absolute use of financial resources for operational planning	see capacity; no allocation to costs neutral to the volume of output; can only be made plausible by comparison with the planned use of resources; prioritising the use of resources depends on the state of development (e.g. degree of automatisisation) and the company-specific importance of the process	a	
efficiency of controlling process (with identical qualitative output / effectiveness); breaking down controlling costs to the controlling processes that is suitable for benchmarking	see process costs; relating these to sales provides only limited information if there are volatile price developments	a	x
analogous to process costs (sales)	see process costs	a	x

Controlling Process KPIs

Forecasting				
Quality				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	reliability and accuracy	→ forecast variance	(actual EBIT (EUR) - EBIT forecast (EUR)) / EBIT forecast (EUR) * 100	%
	frequency adapted to company dynamics	→ forecasts p.a.	-	number
	fulfillment of customer needs	→ customer satisfaction	survey: mean	scale 1-5
Time				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	short forecasting process (standard forecast)	→ lead time	working days from start (according to schedule) to finish (presentation of forecast result)	WD
Costs				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	adequate use of resources	→ capacity		FTE
IGC		→ capacity (FTE)	FTE forecasting / FTE controller organisation * 100	%
		→ process costs	output-related personnel costs + share in cost of materials	EUR
		→ process costs (sales)	process costs forecasting (EUR) / sales (EUR) * 100	%
		→ process costs (FTE)	process costs forecasting (EUR) / FTE total	EUR

Frq - Frequency (suggestion): m - monthly, q - quarterly, a - annually, ad - ad hoc; BM - suitable as benchmark

Fig. 6: Process scorecard forecasting

Controlling Process KPIs

Significance	Interpretation note	Frq	BM
high variation between actual and forecast indicate poor quality and reliability of forecast	the interpretation needs to differentiate between external and internal influences as also major changes in the environment lead to deviations (trigger ad hoc forecasts)	a	x
the more volatile the business, the more sensible to have frequent forecasts to derive control measures	forecasts are defined as estimates that at least cover the scope of the P&L	a	x
satisfaction of internal clients with forecasting; 1 ... very satisfied, 5 ... very dissatisfied	assumption: survey is conducted correctly (e.g. avoidance of distortions, bias)	a	
Significance	Interpretation note	Frq	BM
increasing the efficiency of the forecasts by shortening the processes; management's ability to act improves if forecast is presented soon (within management reporting)	various factors and conditions influence the length of the forecasting process (level of detail, degree of (de-) centralisation, ...); it is assumed that acceleration is possible without a loss of quality (e.g. by reducing idle periods).	q	x
Significance	Interpretation note	Frq	BM
resources available in forecasting	can only be made plausible by comparison with the planned use of resources; prioritising the use of resources depends on the state of development (e.g. degree of automatisisation) and the company-specific importance of the process	a	
indicator for the efficiency and relative importance of forecasting	part of the output in the process is outside the controller organisation (reduced measurability and higher measurement effort required)	a	x
absolute use of financial resources for forecasting	see capacity; no allocation to costs neutral to the volume of output; can only be made plausible by comparison with the planned use of resources; prioritising the use of resources depends on the state of development (e.g. degree of automatisisation) and the company-specific importance of the process	a	
efficiency of controlling process (with identical qualitative output / effectiveness); breaking down controlling costs to the controlling processes that is suitable for benchmarking	see process costs; relating these to sales provides only limited information if there are volatile price developments	a	x
analogous to process costs (sales)	see process costs	a	x

Controlling Process KPIs

Cost accounting				
Quality				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	identifying sources of success (failure)	→ quality of prognosis	average [(contribution margin actual calculation (EUR) - contribution margin preliminary calculation (EUR)) / contribution margin (EUR) preliminary calculation * 100]	%
		→ degree of coverage	actual calculations (number) / preliminary calculations (number) * 100	%
	relevance of cost accounting results	→ share of controllable costs	controllable costs (EUR) / total costs (EUR) * 100	%
	harmonising internal and external accounting	→ share of reconciliation	reconciliation amount (EUR) / total costs (EUR) * 100	%
	fulfillment of customer needs	→ customer satisfaction	survey: mean	scale 1-5
Time				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	timely preparation within the period's accounts	→ lead time	working days from start (finishing accounts in external accounting) to finish (presentation cost accounting report)	WD
	fast accessibility of calculations as required	→ response time	working days from start (request) to finish (presentation calculation)	WD
Costs				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	adequate use of resources	→ capacity		FTE
		→ capacity (FTE)	FTE cost accounting / FTE controller organisation * 100	%
		→ process costs	output-related personnel costs + share in cost of materials	EUR
		→ process costs (sales)	process costs cost accounting (EUR) / sales (EUR) * 100	%
		→ process costs (FTE)	process costs cost accounting (EUR) / FTE total	EUR

Frq - Frequency (suggestion): m - monthly, q - quarterly, a - annually, ad - ad hoc; BM - suitable as benchmark

Fig. 7: Process scorecard cost accounting

Controlling Process KPIs

Significance	Interpretation note	Frq	BM
indicator of the preliminary calculation quality; implies the obligation to conduct both a preliminary and an actual calculation	presupposes standard direct costing; variance can also result from external influences (e.g. unanticipated developments in acquisition prices)	q	
only if an actual calculation is made sources of success (failure) can be identified and the company learns from miscalculations	the KPI measures whether actual calculations are made; it also must be checked whether the content of preliminary and actual calculations is comparable	q	
the higher the share of controllable costs in total costs, the more important it is to have a control-relevant cost accounting and the more congruence is there between cost accounting and cost responsibility.	controllable" costs must be defined for each company	a	
a broad harmonisation (if feasible from a controlling point of view) of valuations in external and internal accounting increases efficiency in both accounting systems and facilitates communication in management reporting	after completion of the harmonisation attempts, measurement is no longer necessary	a	
satisfaction of internal clients with cost accounting; 1 ... very satisfied, 5 ... very dissatisfied	assumption: survey is conducted correctly (e.g. avoidance of distortions, bias)	a	
Significance	Interpretation note	Frq	BM
management's ability to act increases if the cost accounting reports are provided in time	it is assumed that acceleration is possible without a loss of quality (e.g. by reducing idle periods). In order to achieve significant acceleration, preceding systems (e.g. recording company data) are to be included in the optimisation	m	x
the faster calculation results are produced, the higher is the usability of cost accounting in the operative business	assumes that response time can be shortened without an associated decrease in quality (e.g. by reducing idle times); dependent on availability of data from preceding systems	ad	
Significance	Interpretation note	Frq	BM
resources available in cost accounting	can only be made plausible by comparison with the planned use of resources; prioritising the use of resources depends on the state of development (e.g. degree of automatisisation) and the company-specific importance of the process	a	
indicator for the efficiency and relative importance of cost accounting	part of the output in the process is outside the controller organisation (reduced measurability and higher measurement effort required)	a	x
absolute use of financial resources for cost accounting	see capacity; no allocation to costs neutral to the volume of output; can only be made plausible by comparison with the planned use of resources; prioritising the use of resources depends on the state of development (e.g. degree of automatisisation) and the company-specific importance of the process	a	
efficiency of controlling process (with identical qualitative output / effectiveness); breaking down controlling costs to the controlling processes that is suitable for benchmarking	see process costs; relating these to sales provides only limited information if there are volatile price developments	a	x
analogous to process costs (sales)	see process costs	a	x

Controlling Process KPIs

Management Reporting			
Quality			
Process-related objectives	KPI	Calculation of KPI	Unit
supporting decision-making and defining measures	→ report length	number of pages standard report	number of pages
learning from mistakes	errors in the report	-	number
IGC partnering in reporting	→ intensity of discussion	coordination between report recipients and controllers	hours
reducing manual intervention / maximum automatisisation	→ degree of automatisisation	automatically calculated KPIs (number) / KPIs total (number) * 100	%
fulfillment of customer needs	→ customer satisfaction	survey: mean	scale 1-5
Time			
Process-related objectives	KPI	Calculation of KPI	Unit
IGC punctual information	→ punctuality	standard reports presented on agreed date (number) / total standard reports (number) * 100	%
IGC timely information	→ lead time	working days from start (end of month) to WD finish (standard report completed)	WD
Costs			
Process-related objectives	KPI	Calculation of KPI	Unit
IGC adequate use of resources	→ capacity		FTE
IGC	→ capacity (FTE)	FTE management reporting / FTE controller organisation * 100	%
	→ process costs	output-related personnel costs + share in cost of materials	EUR
	→ process costs (sales)	process costs management reporting (EUR) / sales (EUR) * 100	%
	→ process costs (FTE)	process costs management reporting (EUR) / FTE total	EUR

Frq - Frequency (suggestion): m - monthly, q - quarterly, a - annually, ad - ad hoc; BM - suitable as benchmark

Fig. 8: Process scorecard management reporting

Controlling Process KPIs

Significance	Interpretation note	Frq	BM
is used to make the length of the report plausible; diminishing marginal utility of increasing report length can be assumed	the required length of the report also depends on size and complexity of the organisation	a	x
measuring quality at the end of the reporting process, avoiding repetitive mistakes	errors occur also in preceding systems and are not fully within the sphere of responsibility and control of the controllers	m	
intensity of coordination (cooperation) between report recipients and controllers	a high intensity of discussion can, apart from intensive partnering between managers and controllers, also indicate flawed reports or bad data quality	q	
increasing automatisisation improves quality by avoiding manual intervention, but also lowers the use of resources	whether KPIs generated are relevant has to be assessed separately	a	
satisfaction of internal clients with management reporting; 1 ... very satisfied, 5 ... very dissatisfied	assumption: survey is conducted correctly (e.g. avoidance of distortions, bias)	a	
Significance	Interpretation note	Frq	BM
reliability of the reporting schedule	can also indicate shortage of resources in the reporting process or in preceding systems	m	x
timely provision of information increases the management's capacity to act	assumes that lead time can be reduced without an associated decrease in quality (e.g. by reducing idle times); to achieve significant acceleration, preceding systems (e.g. financial accounting) need to be included in the process of optimisation	m	x
Significance	Interpretation note	Frq	BM
resources available in management reporting	can only be made plausible by comparison with the planned use of resources; prioritising the use of resources depends on the state of development (e.g. degree of automatisisation) and the company-specific importance of the process	a	
indicator for the efficiency and relative importance of management reporting	part of the output in the process is outside the controller organisation (reduced measurability and higher measurement effort required)	a	x
absolute use of financial resources for management reporting	see capacity; no allocation to costs neutral to the volume of output; can only be made plausible by comparison with the planned use of resources; prioritising the use of resources depends on the state of development (e.g. degree of automatisisation) and the company-specific importance of the process	a	
efficiency of controlling process (with identical qualitative output / effectiveness); breaking down controlling costs to the controlling processes that is suitable for benchmarking	see process costs; relating these to sales provides only limited information if there are volatile price developments	a	x
analogous to process costs (sales)	see process costs	a	x

Controlling Process KPIs

Project and Investment Controlling				
Quality				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	compulsory capital investment analysis	→ degree of coverage investment analysis	projects (investments) without capital investment analysis (number) / approved projects (investments) total (number) * 100	%
IGC	reliability of cost and returns forecast	→ quality of prognosis	projects (investments) at actual costs better than, or equal to, budget (number) / total projects (investments) (number) * 100	%
IGC	learning from completed projects (investments)	→ degree of coverage actual calculation	projects (investments) with actual calculation (number) / total projects (investments) (number) * 100	%
	fulfillment of customer needs	→ customer satisfaction	survey: mean	scale 1-5
Time				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	fast decision-making	→ lead time	average working days from start (request of capital investment analysis) to finish (presentation of capital investment analysis)	WD
		→ decision-making time	working days from start (presentation of investment analysis) to finish (investment approved / rejected)	WD
Costs				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	adequate use of resources	→ capacity	-	FTE
IGC		→ capacity (FTE)	FTE project and investment controlling / FTE controller organisation * 100	%
		→ process costs	output-related personnel costs + share in cost of materials	EUR
		→ process costs (sales)	process costs project and investment controlling (EUR) / sales (EUR) * 100	%
		→ process costs (FTE)	process costs project and investment controlling (EUR) / FTE total	EUR

Frq - Frequency (suggestion): m - monthly, q - quarterly, a - annually, ad - ad hoc; BM - suitable as benchmark

Fig. 9: Process scorecard project and investment controlling

Controlling Process KPIs

Significance	Interpretation note	Frq	BM
the higher the degree of coverage with capital investment analyses, the more investment decisions are made on a qualified basis	the KPI measures whether a capital investment analysis is made, so the quality of the capital investment analysis has to be dealt with separately	a	
indicator of the quality of the investment analysis and of the binding nature of an evaluation ex post	implies the obligation to conduct a project calculation (investment analysis) and actual calculation; establishing thresholds to limit calculations to important projects can be useful; comparability of preliminary and actual calculations can be hampered by project amendments, management decisions or other factors; availability of historical data potentially limited in the case of long-standing investment endeavours	q	
only when an actual calculation is made, it is possible to identify sources of success (failure) and to learn from incorrect calculations	measures whether actual calculations are made; in addition, comparability of preliminary and actual calculation needs to be considered	a	
satisfaction of internal clients with project and investment controlling; 1 ... very satisfied, 5 ... very dissatisfied	assumption: survey is conducted correctly (e.g. avoidance of distortions, bias)	a	
Significance	Interpretation note	Frq	BM
the management's ability to act increases through the timely provision of capital investment analyses and business cases	it is assumed that acceleration is possible without a loss of quality (e.g. by reducing idle periods); the lead time can be less relevant than in other processes due to the predominantly content-oriented nature of the process.	m	x
decision-making can be accelerated by actively supporting the decision-making process	incl. idle times, decision-making time also depends on the number of levels giving approval	ad	
Significance	Interpretation note	Frq	BM
resources available in project and investment controlling	can only be made plausible by comparison with the planned use of resources; prioritising the use of resources depends on the state of development (e.g. degree of automatisisation) and the company-specific importance of the process	a	
indicator for the efficiency and relative importance of project and investment controlling	part of the output in the process is outside the controller organisation (reduced measurability and higher measurement effort required)	a	x
absolute use of financial resources for project and investment controlling	see capacity; no allocation to costs neutral to the volume of output; can only be made plausible by comparison with the planned use of resources; prioritising the use of resources depends on the state of development (e.g. degree of automatisisation) and the company-specific importance of the process	a	
efficiency of controlling process (with identical qualitative output / effectiveness); breaking down controlling costs to the controlling processes that is suitable for benchmarking	see process costs; relating these to sales provides only limited information if there are volatile price developments	a	x
analogous to process costs (sales)	see process costs	a	x

Controlling Process KPIs

Risk management				
Quality				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	accurate quantification of opportunities and risks	→ risk variance	(actual result (EBIT, EUR) – probable result according to risk management (risk adjusted EBIT, EUR)) / risk adjusted EBIT (EUR) * 100	%
IGC	high transparency of opportunities and risks	→ degree of risk identification	EBIT-actual influence (risks identified, EUR) / EBIT-actual influence (all risks occurring, EUR) * 100	%
	effectiveness of risk response measures	→ risk exposure	EBIT- influence current (EUR) / EBIT- influence initial value (EUR) * 100	%
	fulfillment of customer needs	→ customer satisfaction	survey: mean	scale 1-5
Time				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	timely and punctual information	→ punctuality	risk reports presented on the agreed date (number) / risk reports total (number) * 100	%
		lead time	working days from start (end of month) to finish (completion of risk report)	WD
Costs				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	adequate use of resources	→ capacity	-	FTE
IGC		→ capacity (FTE)	FTE risk management / FTE controller organisation * 100	%
		→ process costs	output-related personnel costs + share in cost of materials	EUR
		→ process costs (sales)	process costs risk management (EUR) / sales (EUR) * 100	%
		→ process costs (FTE)	process costs risk management (EUR) / FTE total	EUR

Frq - Frequency (suggestion): m - monthly, q - quarterly, a - annually, ad - ad hoc; BM - suitable as benchmark

Fig. 10: Process scorecard risk management

Controlling Process KPIs

Significance	Interpretation note	Frq	BM
the better risk management works, the lower is the deviation from the actual income made	it is assumed that there is an aggregation of the impact of risks on a top KPI; the quality of risk management also depends on the cooperation of managers (risk owners) and risk controllers	m	x
independent of the risk-opportunity strategy, the degree of identification should be as high as possible	the quality of risk management also depends on the cooperation of managers (risk owners) and risk controllers	m	
the impact of identified risks on income should decrease over time	risk exposure can change irrespective of whether measures have any effect, a separation of external influences and internal measures is required	m	
satisfaction of internal clients with risk management; 1 ... very satisfied, 5 ... very dissatisfied	assumption: survey is conducted correctly (e.g. avoidance of distortions, bias)	a	
Significance	Interpretation note	Frq	BM
reliability of the reporting schedule	can also indicate resource bottlenecks in the risk management process or insufficient cooperation between risk owners and controllers; risk owners play a major part in the timely identification of risks	m	x
management's ability to act increases if risk reports are presented soon	it is assumed that acceleration is possible without a loss of quality (e.g. by reducing idle periods)	m	x
Significance	Interpretation note	Frq	BM
resources available in risk management	can only be made plausible by comparison with the planned use of resources; prioritising the use of resources depends on the state of development (e.g. degree of automatisisation) and the company-specific importance of the process	a	
indicator for the efficiency and relative importance of risk management	part of the output in the process is outside the controller organisation (reduced measurability and higher measurement effort required)	a	x
absolute use of financial resources for risk management	see capacity; no allocation to costs neutral to the volume of output; can only be made plausible by comparison with the planned use of resources; prioritising the use of resources depends on the state of development (e.g. degree of automatisisation) and the company-specific importance of the process	a	
efficiency of controlling process (with identical qualitative output / effectiveness); breaking down controlling costs to the controlling processes that is suitable for benchmarking	see process costs; relating these to sales provides only limited information if there are volatile price developments	a	x
analogous to process costs (sales)	see process costs	a	x

Controlling Process KPIs

Management Support				
Quality				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	penetration of the organisation with business know-how	→ degree of penetration business know-how	staff and line functions with business qualification (headcount) / staff and line functions total (headcount) * 100	%
IGC	partnering between management and controllers / participation in decision-making	→ involvement in change projects (FTE)	FTE controllers in change projects / FTE controller organisation * 100	%
		→ participation rate in management meetings	management meetings with controllers present (number) / management meetings total (number) * 100	%
IGC	fulfillment of customer needs	→ customer satisfaction	survey: mean	scale 1-5
Time				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	fast availability of controlling resources	→ lead time answering requests	average working days from start (ad-hoc request) to finish (provision of data relevant for decision-making)	WD
Costs				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	adequate use of resources	→ capacity	-	FTE
IGC		→ capacity (FTE)	FTE management support / FTE controller organisation * 100	%
		→ process costs	output-related personnel costs + share in cost of materials	EUR
		→ process costs (sales)	process costs management support (EUR) / sales (EUR) * 100	%
		→ process costs (FTE)	process costs management support (EUR) / FTE total	EUR

Frq - Frequency (suggestion): m - monthly, q - quarterly, a - annually, ad - ad hoc; BM - suitable as benchmark

Fig. 11: Process scorecard management support

Controlling Process KPIs

Significance	Interpretation note	Frq	BM
to interpret controlling reports correctly and use them in decisions, it is necessary for the decision-makers to show business competence	some organisational restrictions have to be made (e.g. analysis up to the xth management level including people responsible for projects); separating primary and secondary (e.g. through internal training) qualification is sensible	a	
inclusion of controllers in decision-making processes, change projects and committees, intensity of active cooperation between controlling and the business	measures the importance of support of change projects in the controller organisation; the benefit of change projects and the necessary degree of participation of controllers have to be assessed separately	q	
inclusion of controllers in decision-making processes, change projects and committees, intensity of active cooperation between controlling and the business	the KPI does not measure whether controllers can actively participate in these meetings and whether they are listened to	q	
satisfaction of internal clients with management support; 1 ... very satisfied, 5 ... very dissatisfied	assumption: survey is conducted correctly (e.g. avoidance of distortions, bias)	a	
Significance	Interpretation note	Frq	BM
management's ability to act increases if event-related requests are answered quickly	it is assumed that acceleration is possible without a loss of quality (e.g. by reducing idle periods); how long it takes to answer the request depends both on the available capacity, the business-specific know-how at hand and the IT-supported access to the data	ad	
Significance	Interpretation note	Frq	BM
resources available in management support	can only be made plausible by comparison with the planned use of resources; prioritising the use of resources depends on the state of development (e.g. degree of automatisation) and the company-specific importance of the process	a	
indicator for the efficiency and relative importance of management support	part of the output in the process is outside the controller organisation (reduced measurability and higher measurement effort required)	a	x
absolute use of financial resources for management support	see capacity; no allocation to costs neutral to the volume of output; can only be made plausible by comparison with the planned use of resources; prioritising the use of resources depends on the state of development (e.g. degree of automatisation) and the company-specific importance of the process	a	
efficiency of controlling process (with identical qualitative output / effectiveness); breaking down controlling costs to the controlling processes that is suitable for benchmarking	see process costs; relating these to sales provides only limited information if there are volatile price developments	a	x
analogous to process costs (sales)	see process costs	a	x

Controlling Process KPIs

Enhancement of the Organisation, Processes, Instruments and Systems				
Quality				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	timely, structured, systematic enhancement	→ scope of process optimisation	controlling processes optimised in the past two years	number
	competitive controlling processes	→ benchmark frequency	benchmark and best-practice comparisons in the last two years	number
	fulfillment of customer needs	→ customer satisfaction	survey: mean	scale 1-5
Time				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	fast implementation of new instruments	→ time-to-market	months from start (recognising the relevance of an instrument) to finish (first use)	months
Costs				
	Process-related objectives	KPI	Calculation of KPI	Unit
	investment in enhancement	→ intensity of innovation	budget enhancement (EUR) / budget controller organisation (EUR) * 100	%
IGC	adequate use of resources	→ capacity	-	FTE
IGC		→ capacity (FTE)	FTE enhancement of controlling / FTE controller organisation * 100	%
		→ process costs	output-related personnel costs + share in cost of materials	EUR
		→ process costs (sales)	process costs enhancement of controlling (EUR) / sales (EUR) * 100	%
		→ process costs (FTE)	process costs enhancement of controlling (EUR) / FTE total	EUR

Frq - Frequency (suggestion): m - monthly, q - quarterly, a - annually, ad - ad hoc; BM - suitable as benchmark

Fig. 12: Process scorecard enhancement of organisation, processes, instruments and systems

Controlling Process KPIs

Significance	Interpretation note	Frq	BM
continuous need for monitoring whether the 10 main controlling processes cover the current controlling needs and whether potentials for optimisation can be identified, need for adaptation where appropriate	KPI comprises heterogeneous development measures (e.g. new planning concept, software introduction), for pragmatic reasons these measures are not weighted	a	
external comparisons measure the effectiveness and efficiency of controlling	breadth and depth of benchmarking also are to be taken into consideration	a	
satisfaction of internal clients with enhancement of controlling; 1 ... very satisfied, 5 ... very dissatisfied	assumption: survey is conducted correctly (e.g. avoidance of distortions, bias)	a	
Significance	Interpretation note	Frq	BM
if a development is recognised as relevant, it should be implemented as fast as possible (fast generation of benefit)	whether improvement measures can be implemented may be outside the controllers' sphere of influence, depending on the management's approval or approval of the budget.	ad	
Significance	Interpretation note	Frq	BM
relative importance of investment in enhancement; current investment makes it possible to adapt the controlling processes to changing requirements	taking into account external services and any relevant costs in other departments (e.g. IT); investment budget defined by management	a	x
resources available in enhancement of controlling	can only be made plausible by comparison with the planned use of resources; prioritising the use of resources depends on the state of development (e.g. degree of automatisisation) and the company-specific importance of the process	a	
indicator for the efficiency and relative importance enhancement of controlling	part of the output in the process is outside the controller organisation (reduced measurability and higher measurement effort required)	a	x
absolute use of financial resources for enhancement of controlling	see capacity; no allocation to costs neutral to the volume of output; can only be made plausible by comparison with the planned use of resources; prioritising the use of resources depends on the state of development (e.g. degree of automatisisation) and the company-specific importance of the process	a	
efficiency of controlling process (with identical qualitative output / effectiveness); breaking down controlling costs to the controlling processes that is suitable for benchmarking	see process costs; relating these to sales provides only limited information if there are volatile price developments	a	x
analogous to process costs (sales)	see process costs	a	x

Controlling Process KPIs

Controller Organisation				
Quality				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	top qualification of controllers	→ intensity of training	trainings (days) / FTE controller organisation total	number
		→ job experience	mean (controlling experience (years) * FTE)	years
IGC	stable controller organisation	→ labour turnover	employees leaving unplanned (number) / employees (average number) * 100	%
		→ employee motivation	survey: mean	scale 1-5
IGC	fulfillment of customer needs	→ customer satisfaction	survey: mean	scale 1-5
Costs				
	Process-related objectives	KPI	Calculation of KPI	Unit
IGC	adequate use of resources / costs at benchmark level	→ capacity	-	FTE
		→ costs of the controller organisation	-	EUR
IGC		→ costs of the controller organisation (sales)	costs controller organisation (EUR) / sales (EUR) * 100	%
		→ costs of the controller organisation (costs)	costs controller organisation (EUR) / total costs (EUR) * 100	%

Frq - Frequency (suggestion): m - monthly, q - quarterly, a - annually, ad - ad hoc; BM - suitable as benchmark

Fig. 13: Scorecard of the controller organisation

Controlling Process KPIs

Significance	Interpretation note	Frq	BM
training activities increase the qualification in the controller organisation	indirect, input-oriented measurement; does not allow any direct conclusions as to the qualification that can be made use of; alternative: direct measurement by means of staff evaluation	q	x
assumption of a positive correlation between job experience and qualification; this also increases the controller organisation's stability	indirect indicator to measure mainly business-specific know-how; improvement in qualification not necessarily the case, diminishing marginal utility of years on the job mainly with repetitive activities	a	x
labour turnover represents the outflow of know-how and, at least temporarily, inefficiencies in the controlling processes	up to a certain degree, labour turnover can also have a positive effect, as know-how can be supplemented from outside	a	x
for personal services, employee motivation is a prerequisite for customer-oriented services; 1...very satisfied, 5...not at all satisfied	assumption: survey is conducted correctly (e.g. avoidance of distortions, bias)	a	
satisfaction of internal clients with the controllers' services; 1 ... very satisfied, 5 ... very dissatisfied	see employee motivation	a	
Significance	Interpretation note	Frq	BM
resources available	can only be made plausible by comparison with the planned use of resources	q	
absolute use of financial resources	cost of goods and of outside services as well as internal cost not allocated, if any, (e.g. cost of relevant IT systems) is to be considered; interpretation analogous to capacity	m	
efficiency of the controller organisation (with identical qualitative output / effectiveness)	cost of goods and of outside services as well as internal cost not allocated, if any, (e.g. cost of relevant IT systems) is to be considered; sales ratio of limited significance for interpretation where prices are volatile	a	x
efficiency of the controller organisation (with identical qualitative output / effectiveness)	interpretation analogous to sales	a	x

7 Abbreviations

a	annually
ad	ad hoc
BI	Business Intelligence
BM	suitable as benchmark
BSC	Balanced Scorecard
CFO	Chief Financial Officer
CIP	Continuous Improvement Process
CM	Contribution Margin
EBIT	Earnings Before Interest and Taxes
ERP	Enterprise Resource Planning
EUR	Euro
FC	Forecast
Frq	Frequency
FTE	Full Time Equivalent
ICV	International Controller Association
IGC	International Group of Controlling
KPI	Key Performance Indicator
m	monthly
M&A	Mergers & Acquisitions
MbO	Management by Objectives
MIS	Management Information System
OU	Organisational Unit
PD	Person Days
P&L	Profit & Loss account
q	quarterly
R&D	Research and Development
SB	Supervisory Board
SLA	Service Level Agreement
WD	Working Day

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