

STUDY REPORT

DISSEMINATION OF CONTROLLING STANDARDS OF THE INTERNATIONAL GROUP OF CONTROLLING (IGC) IN BUSINESS PRACTICE – RESULTS OF AN EMPIRICAL STUDY





Imprint

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MANAGEMENT SUMMARY

Controlling standards are important for companies

The development and dissemination of standards not only contributes to the creation of a common understanding of Controlling in Europe, but also serves as an orientation framework for business practice. By the company-specific implementation of Controlling standards, areas of responsibility of the Controlling department can be clearly defined, efficient processes can be designed, and the performance can be recorded and transparently documented.

Findings on the dissemination of the standards developed so far

In the last two years, IGC has carried out a scientific study regarding the dissemination of its previously published Controlling standards in several European countries. This aimed to evaluate the degrees of recognition, application and satisfaction as well as further development potential in relation to the Controller mission statement, the Controlling process model, the Controlling process KPIs, and the Controller dictionary.

The Controller mission statement is best known across countries

Regarding the degree of recognition and the degree of application, it becomes apparent that the Controller mission statement is by far the most widely used Controlling standard of the IGC. Subsequently, the Controlling process model earned higher recognition than the Controlling process KPIs. The satisfaction of the study participants with the Controlling standards of the IGC is generally high regarding all of the examined Controlling standards.

Diffusion into business practice takes time

The diffusion of IGC's Controlling standards into corporate practice is visible across the various European countries, but is still capable of further development in the years to come.

INTRODUCTION

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In the last 20 years, IGC has published a set of different Controlling standards. With the Controller dictionary, the Controller mission statement, the Controlling process model, the Controlling process KPIs, and the Controller competency model, a solid foundation has been created for effective Controller work in companies and non-profit organizations. In the last two years, IGC has carried out a scientific study on the dissemination of its previously published Controlling standards in several European countries to orientate for their further establishment and, in particular, their needs-oriented further development. The aim of the study was to determine the degrees of recognition, application and satisfaction with respect to the individual IGC Controlling standards. The main findings of the study are summarized in this study report. I am sure that these are not only of interest to our IGC members, but also to the entire Controller community. That is why we have decided to publish them for a wider audience and not just to use them internally.

I also would like to thank all members of the working group for their great commitment and professional work in conducting this study project. Through their work, the dissemination of the IGC Controlling standards across several European countries was evaluated the first time and thus a realistic assessment of their acceptance and application was developed.«

> **FH-Prof. DI Dr. Heimo Losbichler** Chairman of the Management Board of the International Group of Controlling

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1 STANDARDS AS AN ORIENTATION FRAMEWORK FOR COMPANIES

Benefits of Controlling standards

The development and dissemination of standards not only contributes to the creation of a common understanding of Controlling in Europe, but also serves as an orientation framework for business practice. By the company-specific implementation of the Controlling standards, areas of responsibility of the Controlling department can be clearly defined, efficient processes can be designed, and the performance can be recorded and transparently documented.

Controlling must evolve continuously

However, it must be considered that the business environment and the working world of companies are undergoing a continuous change. In many industries, for example, major changes are currently being made as a result of the ongoing digitalization process. These changes are already having a considerable impact on Controlling in companies today, which emphasizes that Controlling also has to evolve continuously.

Sound further development of the Controlling standards as a goal

Against this background, the development of new Controlling standards and the updating of existing ones should provide important impulses. To ensure that this is done in a demand-oriented manner, IGC conducted an international study in Germany, Austria, Switzerland, Croatia and Italy and surveyed employees from the CFO department of companies on the degrees of recognition, application, satisfaction, as well as on the further development potential of the Controlling standards.

> Controlling must evolve continuously

2 CONTROLLING **STANDARDS** OF THE IGC

In the last 20 years the IGC has, among other things, published the following four Controlling standards, which were taken into account of the study: the Controller mission statement (firstly published in 1996 and available in its third version since 2013), the Controlling process model (published for the first time in 2012 and available in its second version since 2017), the Controlling process KPIs (published in 2012) and the Controller dictionary (the German-English/English-German version has already been published in the fourth edition in 2010).

IGC's Controlling standards, which have recently been developed and published, such as the Controller competency model from 2015, have not been included in the scientific study, as for those a low degree of recognition and application can currently be assumed.

2.1 CONTROLLER MISSION STATEMENT

Development of the occupational image and role model of Controllers

Already in 1996, the IGC published its first Controller mission statement to make an international contribution to the development of the Controller's occupational image and role model. This was continuously developed further and has been available in its third version since June 2013.¹

As partners of management controllers make a significant contribution to the sustainable success of the organization. Controllers ...

1. design and accompany the management process of defining goals, planning and management control so that every decision maker can act in accordance with agreed objectives.

2. ensure the conscious preoccupation with the future and thus make it possible to take advantage of opportunities and manage risks.

3. integrate an organization's goals and plans into a cohesive whole.

4. develop and maintain all management control systems. They ensure the quality of data and provide decision-relevant information.

5. are the economic conscience and thus committed to the good of an organization as a whole.«

The mission statement defines the role of the Controller as a proactive, comprehensive companion of the manager on an equal footing and thus successfully sets a standard. Other influential international associations, such as the Institute of Management Accountants (IMA) and the Chartered Institute of Management Accountants (CIMA), followed this role model.²

2.2 CONTROLLING PROCESS MODEL AND -KPIS

Framework for structuring Controlling activities

Another important contribution to an internationally supported Controlling concept is the IGC Controlling process model published in 2012. ³ This provides a framework for structuring Controlling activities timeand content wise. In the Controlling process model, the business process Controlling is systematically divided into main processes, which are then further defined in a process hierarchy using sub processes and activities. Finally, the activities represent individual work steps that build up on each other. The definition takes place at every level of the process model in a standardized format, which comprises a description of the start of the process, the required input, as well as the end of the process and the expected output. Suitable key performance indicators (KPIs) are required at the various levels of the process model to assess the process performance. The Controlling process model defines cross-process and process-specific KPIs for multidimensional measurement of process performance in the categories cost, time, and quality (cf. Fig. 1). ⁴

Elements of the IGC Controlling process model Fig. 1



Description of ten main Controlling processes

According to the Controlling process model, Controlling as a business process of a company comprises a total of ten main Controlling processes (cf. Fig. 2). The seven essential processes from strategic planning to risk management form the core of Controlling. The other three main processes – functional controlling, business consulting and management as well as the further development of the organization, processes, instruments and systems – have a special position due to their specific content. In all main processes, the regulatory loop of Controlling is represented, consisting of setting objectives, planning, and control.

The IGC Controlling process model ⁵ Fig. 2

Controlling Controlling - Main processes Strategic Planning **Operative Planning and Budgeting** Forecasting **Cost Accounting** Management Reporting Setting objectives Planning Control Project and Investment Controlling **Risk Management** Functional Controlling (Subsidiary, R&D, Production, Distribution Controlling etc.) **Business Consulting and Management** Further Development of Organization, Processes, Instruments and Systems

The IGC Controlling process model was revised last year and was published in a second version at the end of 2017.

2.3 CONTROLLER DICTIONARY

IGC Controller dictionary: German-English/ English-German Fig. 3



Reference book for important Controlling terms

The Controller dictionary published by IGC is intended to serve as a reference book for practitioners and students in the field of Controlling for the most important Controlling terms. It comprises more than 170 technical terms from the practice-oriented knowledge of Controlling. The German-English and English-German version was published in the fourth edition in 2010 ⁶ and has been purchased more than 17,000 times since 2000.

> For students and practitioners: with more than 170 technical terms

In addition, also translations of the Controller dictionary in Polish, Croatian, Russian, Slovenian, Czech, and Hungarian exist. For this reason it is an international standard work for definitions of terms in Controlling and Controller work.

3 STUDY BACKGROUND

3.1 STUDY OBJECTIVES

Measurement of the acceptance and dissemination of Controlling standards

In the last two years, IGC has carried out a scientific study on the dissemination of its previously published Controlling standards in several European countries to align their further establishment and, in particular, their needs-oriented further development. The aim was to examine the following aspects with regard to the Controller mission statement, the Controlling process model, the Controlling process KPIs as well as the Controller dictionary:

- ▶ Degree of recognition,
- Degree of application,
- Degree of satisfaction, and
- Development potential.

3.2 STUDY APPROACH

Quantitative online survey as research method

The scientific study was conducted based on a quantitative online survey. This methodology represented a suitable approach, as it enabled to assess the degrees of recognition and application of the IGC's various Controlling standards on a transnational basis.

Data generation and evaluation

The data collection was carried out online in the period from 18th April to 15th September 2016. Previously, the questionnaire required for the online survey was developed by a group of experts consisting of scientists and representatives from business practice, translated into several languages (German, English, Croatian, and Italian), and programmed online using the survey tool Unipark. The evaluation of the data set exported from Unipark was subsequently carried out in Microsoft Excel. For the descriptive evaluation, an adjusted data set has been used, in which only participants who have fully completed the online questionnaire have been considered.

Literature search in German-language journals as an additional analysis

In addition to the online survey, a supplementary literature search was carried out to identify Germanlanguage journal articles with reference to the IGC Controlling standards and thus gain further insights into their degrees of recognition and application.

3.3 SAMPLE

International orientation of the study

The IGC currently has member companies and organizations in 15 European countries. In order to reflect this internationality in the scientific study, a multinational design was chosen for the quantitative online survey and the following countries were selected for data collection:

- 🔪 Germany
- 🔪 Austria
- Switzerland
- 🔪 Croatia
- 🔪 Italy.

The online survey generated a total of 328 fully completed returns, which are mainly distributed among the five European countries selected for the study (cf. Table 1). The category "Other countries" includes participants who have participated in the online survey from European countries other than those previously selected, for example from Belgium and Spain.

Industry affiliation of the study participants

In terms of the industry-specific distribution of the study participants, manufacturers of industrial goods were the largest group with a relative share of 12%. The second most frequently represented sector was the automotive industry with a share of 9%, followed by participants from the financial services sector, which accounted for 8% in total. Other industries (which represented at least 5% of the sample) were:

- Transport/Logistics with 7%,
- Trade with 6%,
- 🔪 IT with 6%,
- Energy with 5% and
- Chemicals with 5%.

Study participants by countries Table 1

Countries	Completely filed returns
Germany	83
Austria	39
Switzerland	51
Croatia	90
Italy	56
Other Countries	9
Total	328

Professional background of the study participants

Survey participants from Controlling departments accounted for the largest share of the online survey with 184 respondents (cf. Fig. 4). In addition to departmental affiliation, the position of the respondents was also recorded. Therefore, a subdivision into top management, divisional manager, department head, assistant to the management, and subject matter expert was used. The 205 participants with management responsibility (top management, divisional managers, and department heads) represent 62.5% of the sample.



Professional background of the study participants Fig. 4

3.4 SUPPLEMENTARY LITERATURE SEARCH

Scope of the literature search

In the supplementary literature search, the Controller mission statement, the Controlling process model, and the Controlling process KPIs were considered

as relevant IGC Controlling standards. It included journal articles in German-speaking countries and covered the period from 2011 to 2016.

Journals analyzed

The journal analysis included the following journals. These are allocated according to the analyzed countries.

Sermany:

- Controlling Zeitschrift für erfolgsorientierte Unternehmenssteuerung
- Controlling & Management Review

- Controller Magazin
- Controlling-Berater
- 🔪 Austria:
 - CFO aktuell
- Switzerland:
 - Der Schweizer Treuhänder

Selected procedure

In order to identify relevant articles, the online archives of the journals were searched by means of previously defined search terms. The following search terms were used:

- "process", "KPIs",
- "mission statement", "philosophy", "guidelines", "role",
- "IGC", "Group of Controlling" and "International Group of Controlling".

When analyzing the content of the identified journal articles, a distinction was made between articles that dealt with the Controlling standard as the main subject matter and those, which merely established a content reference to the Controlling standard. An article was included in the category "main subject" if it dealt with the relevant Controlling standard in a fundamental and decisive way. The main objective is to introduce, describe, and/or guide the implementation of a certain Controlling standard. In contrast, an article was placed in the category "related to a Controlling standard of the IGC" if it contained a contextual reference to a Controlling standard, but without focusing on the Controlling standard itself in the article.

4 OVERVIEW OF STUDY RESULTS

Before the results are presented in detail for each of the IGC Controlling standards considered in the study (Controller mission statement, Controlling process model, Controlling process KPIs, and Controller dictionary), a first overview of the results is provided. This includes the presentation of the degree of recognition, the degree of application, and the degree of satisfaction.

4.1 DEGREE OF RECOGNITION OF THE IGC CONTROLLING STANDARDS

Country-specific presentation of the degree of recognition

To be able to assess the dissemination of the IGC Controlling standards, it was initially important to ascertain the degree of recognition of the standards in the individual countries. The corresponding results are shown in Figure 5.

Degree of recognition of the Controlling standards of the IGC by countries $_{\rm Fig.\,5}$



Controller Mission statement by far the best known Controlling standard

The results show that the Controller mission statement is the most widely known standard in all countries covered by the study. In Germany, Austria, and Croatia in particular, the Controller mission statement has a high degree of recognition, which clearly distinguishes it from the other considered Controlling standards. Depending on the country in question, either the Controlling process model or the Controller dictionary has the second or third highest degree of recognition. The Controlling process KPIs have the lowest degree of recognition in all considered countries. Furthermore, it is noticeable that in Switzerland and Italy the degree of recognition of all considered IGC Controlling standards is significantly lower compared to Germany, Austria, and Croatia. In Austria, all IGC Controlling standards, except for the Controller dictionary, have the highest degree of recognition. For the Controller dictionary, the degree of recognition in Austria is only surpassed by Croatia, where there is a high demand for translations of Controlling terms into English and German.

The IGC Controller mission statement owns the highest awareness

4.2 DEGREE OF APPLICATION OF THE IGC CONTROLLING STANDARDS

Country-specific presentation of the degree of application

Further to recognition, the degree of application of the IGC Controlling standards was surveyed as well. This indicates how intensively the study participants use the IGC Controlling standards. Only responses from participants who have previously indicated that they are familiar with the respective Controlling standard were taken into account. The question of degree of application could be answered on a scale from 1 (not at all) to 5 (very intensive). The results are shown in Figure 6.

Degree of application of the Controlling standards of the IGC by countries $_{\rm Fig.\ 6}$



Controller Mission statement is used most intensively

The Controller mission statement is the most intensively used Controlling standard across all countries. The Controlling process KPIs have established themselves as the Controlling standard with the second highest degree of application in the countries considered in the study. This is mainly due to the relatively intensive use in Germany and Croatia.

Regarding the individual countries, in Germany, Austria, and Croatia, the usage intensity of all measured IGC Controlling standards is average, whereas in Switzerland and Italy only very low usage intensities can be observed. The second highest intensity of use is noticeable for the **Controlling process KPIs**

4.3 SATISFACTION WITH THE IGC CONTROLLING STANDARDS

Country-specific presentation of the satisfaction

In view of the need for further development of the IGC Controlling standards, basic satisfaction with the different standards is an important factor. The participants of the survey were therefore asked to what extent they are satisfied with the respective IGC Controlling standards. Here again, only answers from participants who had previously stated that they knew the respective Controlling standard were measured. The question could be answered on a scale of 1 (very dissatisfied) to 5 (very satisfied). A high level of satisfaction with the IGC Controlling standards can be observed across countries. The Controller mission statement achieves the highest level of satisfaction, followed by the Controlling process KPIs in second place and the Controlling process model in third place. Regarding the countries considered, Croatia achieves the highest satisfaction values for the IGC Controlling standards considered in the study, followed by Germany and Austria. Figure 7 provides an overview of the results on satisfaction with the IGC Controlling standards by countries.

Satisfaction with the Controlling standards of the IGC by countries Fig. 7



5 DETAILED RESULTS FOR THE IGC CONTROLLER MISSION STATEMENT

After an overview of the most important results for the four IGC Controlling standards examined in the study, this chapter presents selected detailed results for the Controller mission statement.

5.1 DEGREE OF RECOGNITION AND SOURCES OF RECOGNITION

Source of recognition by country

As described previously, the Controller mission statement is by far the most widely known among the various Controlling standards. In this context, it is of interest, which sources have contributed to the recognition of the Controller mission statement. For this purpose, various sources of recognition were surveyed in the study. Both specialist literature and external events (e.g. conferences, meetings, or further education seminars) have proven to be important factors in the dissemination of the Controller mission statement. In comparison, the IGC website only plays a minor role. The results are shown in Figure 8.

> The Controller mission statement of the IGC has the highest recognition

Sources of recognition of the IGC Controller mission statement Fig. 8



Further Sources: Controlling Center St. Gallen, International Association of Controllers, University Studies, Assocontroller, Degree Theses, Memberships, Controller Akademie

In addition, the results show that regional differences exist in the effectiveness of the various sources of recognition. While in the DACH region (Germany, Austria, and Switzerland) literature plays a much larger role in comparison to external events, the importance of the different sources of recognition in Southern and Eastern Europe is exactly the opposite.

Results of the journal analysis

For the German-speaking countries, the analysis of the journal articles with regard to the Controller mission statement shows quite different results (cf. Fig. 9). Whereas in Germany, in the past five years there have been regular references to the Controller mission statement in various specialist journals, this cannot be proven at all for Switzerland. The numerical difference between Germany and Austria can be explained by the number of journals analyzed. As only "CFO aktuell" was included in the literature search in Austria, a regular substantive reference to the Controller mission statement can also be observed there.

Journal articles with regard to the IGC Controller mission statement Fig. 9



The country-specific differences in the journal analysis thus also reflect the results relating to the degree of recognition of the Controller mission statement among the study participants.

5.2 DEGREE OF APPLICATION AND AREAS OF APPLICATION

Degree of application of the Controller mission statement

The Controller mission statement shows an average degree of application across all countries considered. The average value amounts to 2.94, whereby the mean of the scale chosen in the questionnaire reflects the value 3. There are considerable differences in the intensity of application between countries. In Croatia, the Controller mission statement is used to an above-average extent, with 3.49 on the fivetiered scale. The second largest degree of application is achieved in Austria with a slightly aboveaverage value of 3.19. In contrast, in Germany, the Controller mission statement ranks slightly lower than the average degree of application, since the value is only 2.65 on the five-tier scale. Finally, Italy and Switzerland, with values of 2.46 and 2.20, have a below-average degree of application.

In addition to the degree of application, also the areas of application were surveyed for all IGC Controlling standards. According to the results of the study, the Controller mission statement is primarily used to communicate the self-image to internal customers and to serve as a guideline for performing the Controller's work. The other areas of application in the survey (motivation of Controllers, control instrument for assessing Controlling performance, and decisionmaking tool) are of subordinate importance with regard to the Controller mission statement (cf. Fig. 10).

Application areas of the IGC Controller mission statement Fig. 10



Value proposition of the Controller mission statement

Furthermore, the survey also covered the benefits of the Controller mission statement. Participants should indicate to what extent the Controlling standard would be useful in the following areas:

- Derivation of goals for the Controlling area,
- Orientation in the context of the daily work,
- Definition of the self-conception of Controlling,
- Increase in Controlling performance, and
- Communication of the Controlling self-conception towards management.

The results show that in relation to all different areas, a slightly above-average benefit by the Controller mission statement for the Controllers can be recorded. The definition of the Controlling self-perception, its use as a means of communication and the basis for deriving objectives for the Controlling area are identical and most pronounced. Figure 11 summarizes the results regarding the value proposition of the Controller mission statement in the different areas.

Value proposition of the IGC Controller mission statement Fig. 11



5.3 SATISFACTION AND FURTHER DEVELOPMENT

Satisfaction with the Controller mission statement by country

In terms of satisfaction, the Controller mission statement comes out best among the Controlling standards taken into account in the study. If the overall sample is considered on a cross-country basis, satisfaction is well above average at 3.95 points on a five-tier scale. The highest level of satisfaction is achieved by the participants from Croatia and Austria with scores of 4.14 and 4.12. Comprehensively, satisfaction differs only slightly from one country to another.

Further development of the Controller mission statement

In order to identify further development potential of the Controller mission statement, the significance of important trends in Controlling with regard to the design of the mission statement was queried. In this context, the following trends were included in the survey:

- Increasing changes in the job description (e.g. fewer planning, automated forecasting, analysis and strategy of specialists, merging of Controlling and accounting).
- Greater flexibility in the use of resources against the background of increased volatility and dynamics in the business environment.
- On-going digitalization and flexibility of the working world, such as Industry 4.0.
- Increasing changes in the IT environment due to the increasing amount of data and new technologies for data analysis and information retrieval.
- New organizational forms in Controlling, such as shared service centers or reporting factories.
- Increasing number of external accounting standards as influencing factors for Controlling.

The respondents attach the greatest importance to the trends of change in the job description and the IT environment with regard to the further development of the Controller mission statement. Other trends in Controlling, such as external accounting standards or new forms of organization, are given slightly less importance for the adaptation of the Controller mission statement compared to the trends mentioned above. Figure 12 shows the results regarding the importance of trends in detail.

> Changes in the IT environment play a major role in the further development

Importance of future trends for the IGC Controller mission statement Fig. 12



Concrete development potential

In addition to the indirect derivation of the further development potential for the Controller mission statement from the trends in the Controller area, the survey participants were also asked for direct suggestions regarding the improvement of the standard. The following list contains the study participants' suggestions for improving the Controller mission statement:

- Independent sparring partner for business management control
- ▶ View Controller as a member of management
- Lack of strategy, process, and cost transparency
- Implementation of measures
- Targeted and receiver-oriented information provider
- Controllers are too limited and too abstract
- ▶ Role definition
- Missing best practices
- Co-responsibility for the achievement of goals
- ▶ Data warehouse is essential.

6 DETAILED RESULTS FOR THE IGC CONTROLLING PROCESS MODEL AND -KPIS

In this chapter, selected detailed results for the Controlling process model and Controlling process KPIs are presented.

6.1 DEGREE OF RECOGNITION AND SOURCES OF RECOGNITION

Degree of recognition in the individual countries

As already described previously, the Controlling process model and the Controlling process KPIs are less well known than the Controller mission statement. Figure 13 provides an overview of different sources of recognition for the Controlling process model and the Controlling process KPIs. The results again refer to the four categories of acquaintance (literature, external events, professional daily life, IGC website) and are divided into the same groups of countries.

> Controlling process model and -KPIs are far less known

Sources of recognition of the IGC Controlling process model and the Controlling process KPIs Fig. 13



Overall, the sources of recognition for the Controlling process model and the Controlling process KPIs are similar to those of the Controller mission statement (cf. chapter 5.1). Literature and external events have proved to be important again. The sources of recognition studied have a different relevance in the various regions. While Controlling standards, in the DACH region are mainly known from specialist literature, external events are cited as the main source of recognition in Southern/Eastern Europe. Comparatively less important for the degree of recognition of the two Controlling standards are the professional daily life and the IGC website.

Journal analysis results for the Controlling process model

The analysis of the articles published with reference to the Controlling process model essentially reflects the same country-specific distribution as previously described for the Controller mission statement. Germany again shows by far the highest value. Austria comes second with a total of nine articles that relate to the Controlling process model. In Switzerland, comparable to the Controller mission statement, there is no article with a substantive reference to the Controlling process model. The relatively large numerical difference between Germany and Austria can be explained by the different numbers of analyzed journals in both countries.

Journal articles with regard to the IGC Controlling process model Fig. 14



Results of the journal analysis for the IGC Controlling process KPIs

The articles published with reference to the content of the Controlling process KPIs show a significantly lower level compared to the previous standards. In Germany and Austria, three or two articles respectively have been published in journals dealing with the Controlling process KPIs.

Journal articles with regard to the IGC Controlling process KPIs Fig. 15



6.2 DEGREE OF APPLICATION AND AREAS OF APPLICATION

Degree of application of the Controlling process model and -KPIs by countries

Among the respondents who stated that they were familiar with the Controlling process model and the Controlling process KPIs, the degree of application was also surveyed. Both Controlling standards have an average degree of application. The Controlling process KPIs are applied more intensively with an average value of 2.77 than the Controlling process model with an average value of 2.55. The most intensive use of the Controlling process KPIs is in Croatia. Among the participants in the survey, a degree of application of 3.21 was observed there. Totally different is the situation in Switzerland, where among the 51 survey participants no company uses the Controlling process KPIs. A similar picture can be seen regarding the application of the Controlling process model. The highest degree of application of the Controlling process model is to be noted in Croatia with a value of 2.80, whereas the lowest average degree of application of the Controlling process model with 1.50 is to be noted in Switzerland.

Croatia uses the Controlling process KPIs most intensively

Application areas

The study also included questions about various application areas of the Controlling process model and the Controlling process KPIs. Participants in the study were asked to indicate the extent to which both Controlling standards are used concerning benchmarking analyses, the implementation of IT systems, measuring process performance, Controlling processes, defining tasks, structuring workflows, and determining process responsibilities (cf. Fig. 16).



Application areas of the IGC Controlling process model and the -KPIs $_{\rm Fig.\ 16}$

Broad application of Controlling process model and -KPIs

As the results of the study show, users apply the Controlling process model and the Controlling process KPIs for several different purposes without focusing on specific application purposes. Both the Controlling process model and the Controlling process KPIs are most often used to define the spectrum of tasks and to structure the processes within the Controlling organization. The two standards thus have an organizing function for companies and organizations. To a lesser extent, the two Controlling standards are used for benchmarking analyses or as part of the implementation of IT systems.

6.3 SATISFACTION AND FURTHER DEVELOPMENT

Satisfaction with the Controlling process model and the -KPIs by countries

With an average satisfaction rate of 3.66, the Controlling process KPIs are slightly ahead of the Controlling process model, which achieves an average satisfaction rate of 3.62. Satisfaction with the Controlling process model and the Controlling process KPIs differs considerably from country to country. In Germany, with a value of 4.00, the highest satisfaction among the survey participants is recorded about the Controlling process KPIs. Italy has a value of 3.88 for the Controlling process model. A comparatively low level of satisfaction was determined in relation to the Controlling process KPIs for Austria, for which only a value of 2.89 is recorded.

Renewal of the Controlling process model

The Controlling process model was also analyzed regarding the potential of further development opportunities. For this purpose, various trends in Controlling were mentioned in the survey, the importance and relevance of each was to be assessed by the participants considering the Controlling process model (see Fig. 17). The significance of the trends themselves was not assessed, but rather their relevance for the further development of the Controlling process model. Trends included in the survey are listed below:

Employee qualifications and competence management against the background of increased methodological, analytical and personal requirements and in the course of increasing digitalization.

- Working capital management as a process due to its high relevance in the financial organization.
- Control of data quality in Controlling as a process for the active control of data, data quality, and the creation of transparency in the relationship between data quality and economic benefit.
- New organizational forms of Controlling with centrally performed processes in Controlling of shared service organizations.
- Big Data & Analytics for the targeted use of information and its effective use for decision support in Controlling.
- Making the use of resources more flexible through the availability of funds, even outside a rigid budget process.

Importance of future trends for the IGC Controlling process model Fig. 17



Overall, the survey participants attributed comparatively high importance to each of the trends listed. Big Data & Analytics and the control of data quality are slightly highlighted. This shows that the Controller community is in favour of an increasing orientation of the Controlling process model with regard to digitalization.

Focus on digitalization is desired

7 DETAILED RESULTS FOR THE IGC CONTROLLER DICTIONARY

This chapter presents selected detailed results for the IGC Controller dictionary.

7.1 DEGREE OF RECOGNITION AND SOURCES OF RECOGNITION

Degree of recognition by countries

Among the Controlling standards examined in the study, the Controller dictionary is the best known after the Controller mission statement. 22% of the survey participants stated that they were familiar with this Controlling standard. With a value of 37%, the recognition of the Controller dictionary is highest in Croatia, while the Controller dictionary has the lowest recognition in Italy with 9% (see Fig. 18).

Degree of recognition of the IGC Controller dictionary by countries Fig. 18



7.2 DEGREE OF APPLICATION AND AREAS OF APPLICATION

Degree of application of the Controller dictionary by countries

The analysis of the Controller dictionary's degree of application shows an average usage of the standard. It turns out that the Controller dictionary is the third most widely used standard of the IGC. Croatia uses the Controller dictionary most frequently with a rating of 3.05, followed by Austria with a degree of application of 2.88. The lowest application and simultaneous recognition, with a rating of 1.83 is found in Germany. The German-English language version of the Controller dictionary is very widespread regarding the language versions used. Figure 19 gives an overview of usage in the DACH region. It can be seen that with 82% the German-English version is mainly used in the whole region. Participating Austrian users stated that they worked exclusively with the German-English version. In Germany, however, other versions of the Controller dictionary are also used, as only 67% of users work with the German-English language version.

Regional degree of application of the German-English-version Fig. 19



Value proposition of the Controller dictionary

In a further part of the survey, users of the Controller dictionary were asked about the intended purpose of their use. Figure 20 shows the causes of usage. Participants were asked how far versions of the Controller dictionary help to improve master data quality, determine definition clarity, and with translations in the Controller area. With values between 3.46 and 3.73, the Controller dictionary supports all three usage motives to a similar extent. It also becomes clear that in the future, participants will be able to make an even higher contribution by using the Controller dictionary.

Value proposition of the IGC Controller dictionary Fig. 20



7.3 SATISFACTION AND FURTHER DEVELOPMENT

Satisfaction with the Controller dictionary by countries

In comparison with the other Controlling standards examined in the study, the Controller dictionary has an average value of 3.75 across the entire sample and shows average satisfaction among the interviewed users. The highest satisfaction with the Controller dictionary is found in Croatia. Here, 86% of users mostly use the Croatian-English language version. With a satisfaction rate of 4.32, the dictionary is also the standard with the highest satisfaction. The lowest satisfaction rate of the Controller dictionary with a value of 3.13 is found in Switzerland.

Further development of the Controller dictionary

With regard to the further development of the Controller dictionary, the significance of future formats was examined in the context of the study (cf. Fig. 21). The highest importance was attributed to a web-based format of the Controller dictionary. Furthermore, there is a considerable interest of the survey participants in a Controller dictionary in eBook or PDF format. The survey participants also rated an app-based format positively. All in all, an increasing demand for digital formats of the Controller dictionary can be identified for the future.

There is an increasing demand for **digital formats**

Importance of future trends for the IGC Controller dictionary Fig. 21



Specific development potential

In addition to the aforementioned trends, the survey participants were also given the opportunity to express specific wishes for the further development of the Controller dictionary. The following points were mentioned:

- Inclusion of "Management Information System" and "Data Warehouse" topics
- Modification of graphics and font sizes
- Classification according to keywords and definitions
- Creation of an online version with cross-references.

Online version with cross references desired

8 CONCLUSION

Controller mission statement has the highest degree of recognition

Regarding the degree of recognition, it can be seen that the Controller mission statement is by far the best-known Controlling standard of IGC. The lower awareness of the Controlling process KPIs in comparison to the Controller mission statement and the Controlling process model can be explained, on the one hand, by the later publication date and, on the other hand, by greater consideration in specialist publications. While the Controller mission statement and the Controlling process model are quite frequently mentioned there, the Controlling process KPIs have seldom been discussed so far.

Degree of application of the Controlling standards of the IGC

With regard to the degree of the application, it should be noted that the Controller mission statement in comparison to the Controlling process model or the Controlling process KPIs has the highest values. In comparison to the degree of recognition, the Controlling process model and the Controlling process KPIs switch positions in this category. According to the results of the study, the Controlling process KPIs are used more intensively than the Controlling process model. This result can be attributed, among other things, to the fact that performance measurement and management is carried out on a continuous basis with the help of the Controlling process KPIs for most companies, whereas the new design or restructuring of the Controlling area only takes place at irregular intervals.

High degree of satisfaction with the Controlling standards

The study participants' satisfaction with the Controlling standards of the IGC is high for all examined Controlling standards across countries. The study participants are most satisfied with the Controller mission statement. However, the Controlling process model and the Controlling process KPIs follow

Diffusion of Controlling standards into corporate practice takes time

All in all, the diffusion of the Controlling standards of the IGC into corporate practice is recognizable across the various European countries, but is still capable of further development in the years to come. almost equally at a relatively small distance. Despite the overall high level of satisfaction, individual concrete indications were also expressed by the survey participants with regard to the further development of the Controlling standards.

> There is a high degree of satisfaction with the **Controlling standards**

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INTERNATIONAL GROUP OF CONTROLLING

The International Group of Controlling (IGC) is an interest group that was founded in 1995 as an international cooperation of institutions and companies active in the field of education, training, and research in Controlling. Since then, IGC has set itself the goal of establishing international standards for Controlling in corporate practice as well as the training and further education of Controllers. It offers its members a forum for a continuous professional exchange of opinions and ideas.

IGC is involved in the development, coordination, and dissemination of internationally uniformly applicable Controlling concepts and terminologies, the occupational image and role models of Controllers as partners in management, and standards for the qualification of Controllers and managers.

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