



FIVE RECOMMENDATIONS

HOW TO PROPERLY DESIGN DIGITAL INFORMATION PROCESSES



INFORMATION AS A CORPORATE RESOURCE

The quantity of information we record, pass on and archive has literally exploded due to the sheer availability of digital communication technologies. According to a recent analysis done by the U.S. software developer, Excelacom, 150 e-mails are being sent – every minute! In addition, there are ca. 20.8 million WhatsApp messages as well as 347,222 twitter feeds in the same amount of time. In view of these figures, it becomes perfectly clear that we're living in the information age where information has become an important asset. Especially for business companies.

Offers, concepts, invoices, correspondences – business processes are all about editing, exchanging or storing information. In an increasingly competitive world, the speed in which these processes are accomplished is crucial. Having control of your information flow means you can respond to customer inquiries or find a solution faster and work more efficiently than your competitors. We've all heard this before, but if you look at how businesses deal with their information, one has to wonder if these corporations have really recognized the immense value of this resource. This becomes clear in the results of the IDC study "Mobile Content Management in Germany 2016". The market research institute draws the conclusion that many knowledge workers in German companies and organizations have insufficient access to the data files and documents they need for their work. Users are particularly obstructed by the proliferation of storage options which has accumulated over the years. And this stand in the way of productivity. For lack of an alternative, users often turn to their private file-sharing service for business purposes. This is reported to be particularly common in small and medium-sized companies, where information flow is still limping along. Especially in consolidated companies, we see the media discontinuities resulting from established structures regularly

causing mistakes. Often it's an oversupply of information which overstrains employees and slows down business processes. To put it briefly, it's primarily about making vital information easily accessible to a certain category of persons. On the other hand, documents that are no longer required should be deleted – under consideration of retention periods and safekeeping obligations, of course.

Companies should therefore carefully scrutinize their information processes. On the following pages we will discuss a few key questions you should ask as a managing director, division manager or head of department.

FROM ANALOGUE IDEA TO A DIGITAL WORKFLOW: THE DO'S AND DON'TS OF OPTIMIZING INFORMATION PROCESSES

Digital technologies contribute to improving the workflow within the company. Once they are established in the company and employees recognize their value and how best to implement them, digital technologies offer a true competitive edge.

Responding quickly to requests and customer needs, ensuring employees in all departments have instant and equal access to vital information, establishing cost-efficient internal structures – those are the key requirements for companies and organizations today if they are really concerned about optimal information management. Not only does this involve sharing information with clients or service providers. Ensuring the smoothest possible information flow between departments or individual employees is just as important. Particularly if staff members have to keep an eye on several projects simultaneously. Business as usual today, right?

A carefully considered information management solution provides a pivotal cross-divisional function for the company: On the one hand, it horizontally connects various business units. On the other hand, it provides closely interlinked information vertically – e.g. within a department, thus ensuring efficient and effective working conditions. Regardless of whether it concerns marketing, procurement, accounting or research & development: all departments share the same goal, i.e. to be faster than the competition! This sounds very simple, but often it's

not. Companies often make the mistake in attempting to take five steps forward at once when they decide to optimize their information management. Only in the rarest of cases will this approach turn out to be successful. To put it bluntly: Someone who used to work with a typewriter up until yesterday won't be settled in a purely digital office tomorrow.

But how can you digitalize and thereby optimize the flow of information? To answer that question, first you have to become aware of the following: Whenever we generate, receive or pass on information, it's always a document-based process – no matter if that's an e-mail to a colleague, drawing up an order or communicating with a customer. The exchange of information always happens via a digital or analog document. This being said, it becomes clear that optimizing your information management should start with your document processes. To ensure the implementation of a software-based solution or the transition from an established, yet inefficient, workflow is successful, you should pay special attention to the following recommendations.

RECOMMENDATION NO. 1: TAKE PARTIAL STEPS

When generating digital information or document processes, it has proven to be most practical to start with a limited number of departments first. This can, for example, be the sales department within which you begin by speeding up the process of entering orders. Or you may choose to begin in human resources by digitizing personnel files, or in bookkeeping by storing or editing incoming invoices as a PDF rather than cataloguing them in cardboard boxes. It is only when individual departments have optimized single steps that you can implement a more comprehensive digital workflow. A centralized database that makes all information accessible to any authorized employee at any time will ensure that all members of your staff are always kept up to date. Every (authorized) employee may, e.g., access a digital customer file – even simultaneously with colleagues. What appears to be a simple undertaking at first actually requires an exact analysis upfront, usually a consulting service

which is mostly purchased externally. Simply transferring a formerly analog business process one-to-one to the digital universe won't work. You should rather consider the exact nature of the often organically grown structures – at the latest in the second step.

When choosing a software or drawing up an information management concept it is best to orient oneself on existing analog working procedures. Implementing a sustainable digital system is more like building a new road than just adding new tar to an existing one or adding another lane.

RECOMMENDATION NO. 2: PLAN AHEAD

Before embarking on the first step, it should be clearly determined where you want to be at the end of the transformation process. We suggest you start by making a “snapshot” of current work processes and how the department is dealing with the different kinds of information and documents. Is any information already being sha-



red, edited or archived digitally or is it still paper-based? As soon as you have a clear picture of the processes in your company, you may get started. Next step: examine all usual procedures. Find out how paper-based documents as well as those present in digital form are being registered and processed in the individual departments. Please bear in mind that many companies have already begun to generate information using portable devices. Don't just take a look at incoming files but also at everything that can be created and sent out by internal sources. A primary concern should be to identify existing media disruptions. Is it really indispensable for all field staff to create written orders on paper? Try to develop a registration and administration process that is as consistent as possible. Watch closely how documents are currently filed and indexed and clarify if this is really the most efficient way. How long does it usually take to find documents that are not needed every day? Can the search only be done by some "luminaries" in the company, or could an apprentice get hold of the desired document just as quickly? For such an inventory we recommend to consult external consultants who are appropriately experienced. The KYOCERA workflow analysis may serve as a good example here – a tried and tested 4-stage model specially designed to analyze information workflows. It starts with re-enacting the path all documents take in a company, thereby clarifying which departments and employees are involved in the different workflows. On this basis, an optimization proposal is compiled which identifies concrete saving potentials.

The advantage of such an analysis is that you can plan selectively in what areas you want to start or rather which optimization processes can be accomplished within individual departments – by restructuring processes or installing a new solution. By the same token, your investment will become future-proof: if, e.g., documents should be retrievable from a tablet PC or a smartphone in the future, they have to be designed accordingly to be easily depicted on all mobile devices. Moreover, it should be possible for them to be easily printed if necessary. It is crucial to consider such future requirements from the very beginning.

RECOMMENDATION NO. 3: CONSIDER SECURITY

Information is a corporate resource – the main focus should therefore be to secure all information. This applies to digital as well as paper-based documents. In order to introduce efficient business processes, it has to be clear who may access and edit which document. That means you will have to check who is currently able to access digital documents. Likewise, it has to be ensured that any paper-based documents may only be disclosed to people with an appropriate authorization – no (uninvited) visitor should be able to look at or steal them. Please remember that a breach of data protection rules may not only result in a drastic penalty, but also in considerable damage to the company's image. Employees must understand that data handling is a very delicate issue and that carelessness may have fatal consequences. For certain documents, retention periods and safekeeping

obligations must always be observed, and the same applies to data protection laws and internal operational regulations. Even the erasure or destruction of data and information must be regulated wisely and prospectively. Therefore, find out about all requirements in this area: whether an SME or a large corporation – companies are subject to obligations with regard to paper filing as well as electronic archiving! Anyone who neglects these will experience an unpleasant surprise – at the very latest during the next audit. The possibilities range from negative consequences as enforced by the tax office to allegations of tax evasion. In addition, there are also sector-specific archival requirements which must be observed in order to avoid sizable fines. With regard to archiving commercial documents, companies must follow certain rules as defined by §257 of the Commercial Code in Germany and by §132 of the Federal Fiscal Code in Austria. Apart from account books and inventories, annual reports and accounting vouchers are also included. As a rule, such documents must be kept for at least ten years, the period beginning with the end of the calendar year. Most of the documents – except the financial statements – may also be archived in electronic form which is more convenient and saves space usually needed for those mountains of files. To archive digital documents in line with the legal requirements, companies must meet legal provisions as defined in the „Principles of sound administration and retention of books, records and documents in electronic form as well as access to data (GoBD)”. This includes criteria such as the immutability, completeness or transparency of the documents.

Companies can freely decide on an archiving solution of their choice, as long as it complies with the guidelines for correct accounting and documentation. Legislation also stipulates that all archived information must be indexed. Furthermore, the data must remain legible, evaluable and open for inspection. To meet these legal requirements, there are appropriate archiving systems which consist of

databases, archiving software and storage devices. The basis of these systems is in most cases a reference database whose index refers to the documents filed in an external memory. The filed data are audit-proof if you are able to read them but not be able to make any changes to them. This is ensured by hardware components based on WORM standards (Write Once, Read Many).

RECOMMENDATION NO. 4: AVOID INFORMATION INFLATION

When optimizing information management, it is good to remember that the value of information changes during its lifecycle. For instance, many business e-mails are really only important on receipt because they require an action (e.g. an incoming complaint). As time goes by, though, they rapidly lose their importance and value. Data relating to a specific project status, on the other hand, may not appear relevant when they are sent out because the recipients still remember the results of a particular meeting. Yet the information content remains constant over a longer period. If you are actively involved in or even responsible for information management, you should be aware that the business value of information is subject to change. The more topical and significant a piece of information is, the more often employees will access it. An extremely important success factor in setting up new work processes – especially with regard to handling documents – is to determine a meaningful and transparent version control system. New employees should also be able to understand the individual processing steps – even years later. It is also important to know which documents must be archived in compliance with legal and auditing standards. Also, it is possible and often useful to determine the deletion of old documents in the very beginning. Only very few documents need to be kept for longer than a decade – e.g. certificates or building plans. The new processes should be defined and presented in such a way that they can be easily comprehended even by new colleagues at any time. This does not mean, ho-

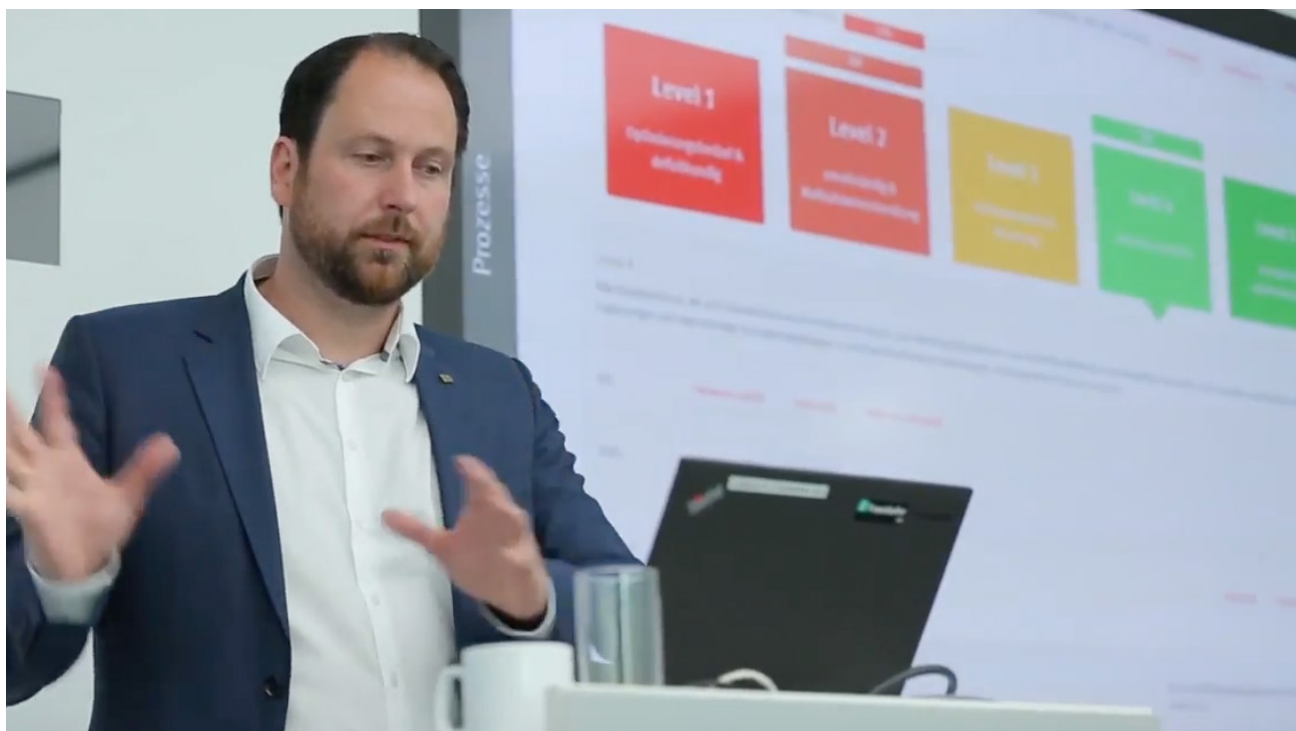
wever, that every single step must be fully transparent for everyone in the company. What's really important is to know which locations and recipients a document is passing through in the company. And especially with regard to sensitive records, all legal requirements on data protection must be observed.

Drawing up an information management system is one thing. The icing on the cake would be to ensure that – from the very beginning – it is able to reflect and implement future technological trends and developments over a medium term.

RECOMMENDATION NO. 5: FOCUS ON EMPLOYEES

Improving the internal information flow primarily requires a few technical modifications. With regard to recurring work processes, what is most often missing is transparency. Communication channels are not clearly defined, and nobody seems to know how a particular transaction has to be dealt with. This can slow a company down – even if it's already equipped with the latest technology. Therefore, it is crucial to realize that technology is always merely a tool. If the employees don't use this tool or don't

understand its function or value to their work, processes and the exchange of information will remain as slow and ineffective as before. The individual steps during the implementation of an optimized information management should under no circumstances be determined exclusively by the IT department or an external consulting company. Staff members across all departments should be involved right from the start. First of all, nobody has greater insight on individual processing steps than the people who use them, and they most probably can also offer advice about stumbling blocks which need improvement. Secondly, any new process should be designed in such a way that the people who are dealing with it every day can immediately recognize an improvement. The introduction of a new solution designed to optimize information management will only become a success if this process is seen as teamwork from the beginning. If communication between departments, teams and locations leaves much to be desired (and the reasons are not obvious), you should indeed outline communication flows not just verbally, but also on paper. Write down exactly which department is responsible for the respective area and



The heart of the KYOCERA potential assessment is a workshop for staff members from various departments.

who is supervising projects there, mark which employees collaborate on projects inter-divisionally and also make a note what the current information channels look like: Which formal pathways does the information flow follow?

Periodic team or project meetings are a good example. A regularly delivered newsletter to employees can also be very useful to thoroughly inform an entire department of new information management systems. Please also consider informal communication channels which are often readily used: What do you learn from the colleagues during lunch or weekly sports courses? Are there private friendships between colleagues which might help the internal exchange of information (or could be detrimental to it)? As positive as friendly relationships between colleagues are, they should not constitute the usual source of information about operational processes or innovations. It is up to project and departmental managers to improve the information flow by creating new and official information platforms – particularly when department staff lack time for more informal information exchange.

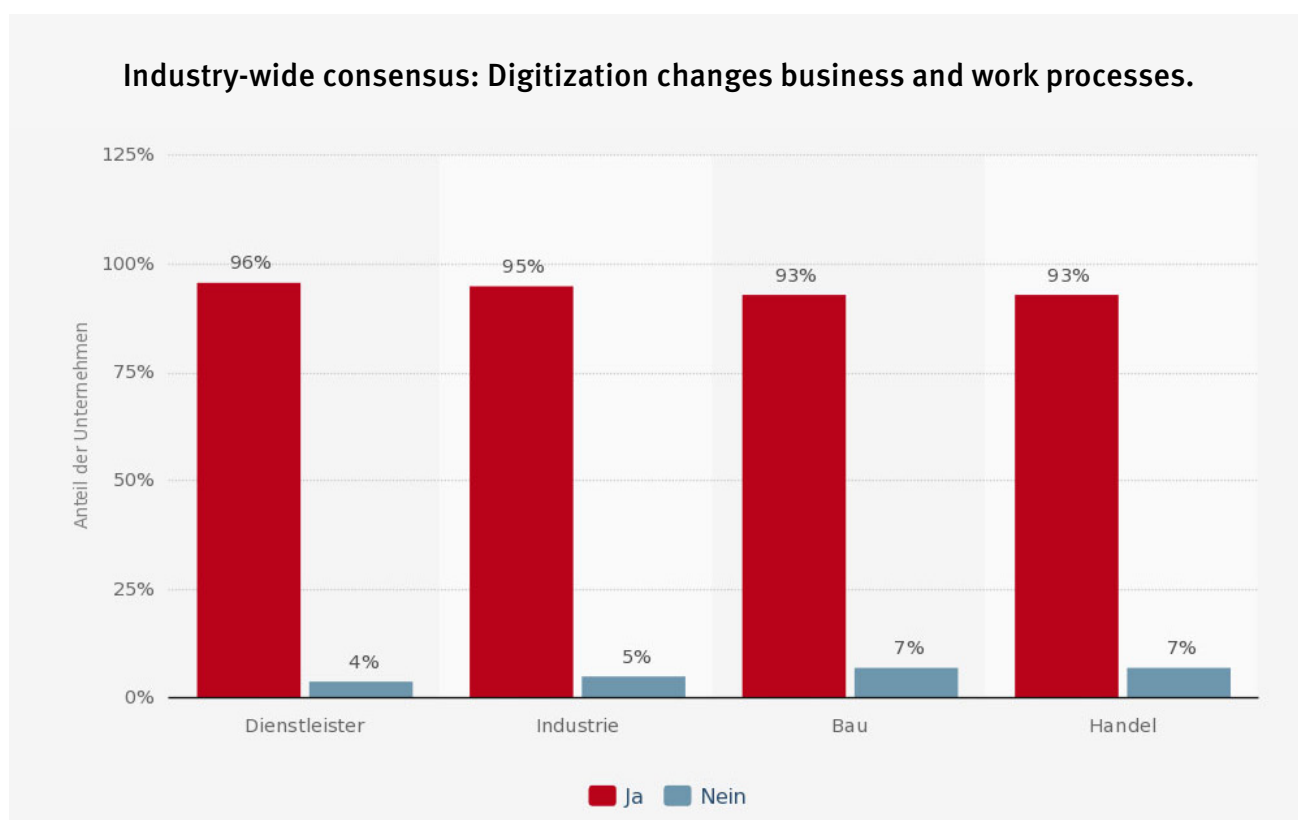
Determine a weekly or monthly meeting for your project! All participants will be given the task to report on the current status of their activities. If this involves employees from various locations, why not collect and distribute those reports beforehand. Where available, use the possibilities of modern video communication and collaboration tools. It is often helpful if you can at least look at a participating colleague from a remote subsidiary on a screen. And remember, not everybody has good writing skills.

Not least it is important to define clear responsibilities. Co-workers who may have accumulated an expertise in a certain section should be made “in-house experts”. This provides a good overview and is also very motivating!

Further information on how to integrate employees in IT projects can be found in our E-Book “The desire for change: How to make IT projects a success with change management”

DIGITAL TRANSFORMATION REQUIRES COURAGE TO EMBRACE CHANGE

Modernizing the information management in a company is not a small step you can accomplish in passing. This is something all decision-makers and project leaders should be very clear about. However, it is also certain that a company which aims at becoming a market leader or at least wants to stand up to the global competition today cannot afford a gravel road for their internal workflow.



So far, competitive readiness in the 21st century can be summed up in one word: speed. The enormous speed boost we experience, originated by the Internet in the 20th century, now drives all modern work processes to achieve their full impact. The impact of this has come as a painful surprise to a few former “global players”. New or formerly unknown companies have seen stellar market growth over incredibly short time periods. In extreme cases, complete structures and processes that for decades

used to be highly profitable for manufacturers and service providers have had to be completely replaced. Entire sectors of industry are suddenly faced with the choice of either radically regenerating or becoming entirely superfluous within a few years. According to a recent poll done by DIHK, more than 90 percent of the companies surveyed indicated – irrespective of their industry – that digitization exerts an influence on their business and work processes.

SCRUTINIZE OLD FORMULAS

The ability to quickly respond to these disruptions and, even better, to proactively instigate change requires both efficient management and modern structures. It is the rare case that operational strategies and processes determined in the 1990s continue to be relevant for success almost thirty years later. If you want to achieve modern structures and a high-performing accessibility to information for your business processes, you must begin by carefully assessing the strengths and weaknesses of your current information and document management system. There has to be sufficient entrepreneurial courage to rethink old habits and to renounce the motto “We’ve always done it that way”. To successfully enter into a really modern workflow dimension requires continually keeping an eye on numerous factors. Compliance rules as well as legal regulations must be strictly observed. This holds especially true for all archiving and retention periods. Many companies also need to massively upgrade their (data) security. This not only applies to the effective protection of networks but also to the internal handling of documents: unauthorized access must be avoided just as much as an authentication which is easy to evade. Confidential documents should only exist in an encoded form.

CLEAR RULES

In technical terms, the aim should be a high-performing holistic solution which includes computer workstations, mobile computers, an existing or a new DMS/ECM solution and additional enterprise software such as ERP, CRM, SharePoint or specific business applications. However, the new technology is at best the beginning of the transition process towards modern information management. Simply introducing new technologies is just one step in the process: you also need a clear set of rules and conditions. In addition to a general information policy, there must be clear conduct guidelines for web, social media and e-mail correspondence. You must regulate and monitor which employees are allowed to use cloud-based servers and if it’s okay for employees to plug their own devices into the company network. Therefore, it is a key issue for employees to familiarize themselves with those rules and to clarify why they are so important. There is only one way to find acceptance for change: you have to sensitize your employees to the value and importance of digital workflows.

ABOUT KYOCERA DOCUMENT SOLUTIONS

Kyocera Document Solutions headquartered in Osaka, Japan is a leading manufacturer of document imaging solutions and document management systems, including colour and monochrome multifunctional products and printers and wide format devices. Kyocera's products are renowned for their unique long-life imaging components that provide greater reliability and less waste — resulting in a lower Total Cost of Ownership (TCO) over the life of the product.

The Kyocera Document Solutions portfolio does not stop at hardware. A full suite of business applications and consultative services allow customers to optimize and manage their document workflow, unleashing the full potential of their hardware investment. Kyocera Document Solutions Inc. is a core company of Kyocera Corporation, the world's leading developer and manufacturer of advanced ceramics and associated products, including telecommunications equipment, semiconductor packages and electronic components.