Sana Einkauf & Logistik

June 2021

Big steps are now called for in digitalisation

Results of the e-Healthcare Supply-Chain Maturity Market Survey

WE
must improve our efficiency with regard to digital **tools and portals** in working processes, between hospitals, group purchasing organizations, business partners and third parties for corporate cross-company, location-independent and fast communication.

WE
need to make the leap from a healthcare supply chain to an **e-Healthcare Supply Chain.** Fragmented data streams need to be linked without media discontinuity, and transparency created as regards to the availability of products.

WE
all consistently implement digital industry standards and thereby achieve efficient routine processes as well as high operational reliability. The goal is highly **scalable optimised routine processes** that conserve resources.

WE
exchange company-wide **data on the products and medical service process.** This enables more reliable forecasts and allows for more flexible cooperation adjustments.

Sana Einkauf & Logistik is pursuing a systematic **digitalisation strategy** for all purchasing and business processes, with cooperations open to new digital products and digital health apps.

Dear Readers,

In 2020, Sana Einkauf & Logistik published a paper with its cooperation and business partners entitled: **“Purchasing and logistics for the healthcare industry – what counts is the WE.”**

The core idea is that industry issues such as supply bottlenecks, sourcing strategies and value chains are not separately conceivable and detachable. The paper also identifies digitalisation, collaboration and qualification as key points. No individual company or body can handle all these mammoth tasks by itself. Once again here what is called for is the WE of the entire industry.

The paper states: **Big steps are now called for in digitalisation.** Why this conclusion? Digitalisation has been hailed as a megatrend for years, but it still hasn’t reached everywhere in healthcare.

Digital solutions should be future-proof, efficient and at the same time secure – both in normal operation and during a pandemic. In order to achieve this goal, the paper identifies areas for action.

How far are we on our way to an e-Healthcare Supply Chain? What steps are needed now? How should our common strategy take account of changes and market shifts?

Our market survey sheds light on these and other questions.

Adelheid Jakobs-Schäfer | Lennart Eltzholtz

“WE want to know more. WE want to move forward together.

There is no way round the systematic digitalisation of purchasing. Sana Einkauf & Logistik has recognised the urgency of the situation and has been investing in the e-Healthcare Supply Chain (e-HCSC) for years. In order to determine the common goal more precisely, we questioned cooperation and business partners about it. Overall, to what extent has digitalisation already been realised in the e-Healthcare Supply Chain? What needs, development opportunities and problems do they see?

Participants were questioned about several topics in order to obtain a meaningful overall picture:

- Which experts and strategic management tools do companies have?
- What is the current status as regards the processing of product master data?
- What is the situation as regards the dissemination and use of classification systems?
- How is add-on information about the product master data maintained?
- Which electronic ordering providers or platforms are preferred?
- To what extent is e-billing already established?
- What is the industry’s position on cross-company marketplaces and B2B webshops?
- How satisfied are stakeholders with the IT solutions provided by SEL?

A key finding from the feedback:

There are now numerous forward-looking technologies available. Actors can use these to master the challenges involved in the digitalisation of the supply chain.

Solidarity of all stakeholders along the value chain is needed. The relevance of standards must be understood by everyone, and rules must be developed and adhered to. In this way we can create efficient processes for the high-quality medical care of patients.

What support do the cooperating hospitals expect for the control of products and cost-effectiveness? This paper presents the results of the survey and derives market trends from it. It also presents the next development steps for the Sana e-Healthcare Supply Chain.

Our sincere thanks go to all cooperating hospitals and business partners in the industry. Without your cooperation, this survey would have been impossible.

Christoph Matt | Christopher Glogger
Oliver Schönfeld

Facts
and figures

The
participating cooperation partners included: **9** hospital groups, **4** university hospitals, **4** facilities in the field of specialist and primary care

The participants represent a purchasing volume of
704
million euros.

98
business partners took part, representing the entire market spectrum.

Relevance
and feedback

The survey topics were covered in 40 questions. Each one was answered from the point of view of business and cooperation partners. This dual perspective allows conclusions to be drawn as to how “loose ends” come together with digital processes.

The role of Sana Einkauf & Logistik was also examined. How can it create added value by bundling data, information and knowledge with innovative IT solutions so that the work is optimally divided between the digital processes?

- **24** smaller companies with fewer than **100** employees
- **42** medium-sized business partners with fewer than **10,000** employees or less than EUR 1 billion turnover
- **32** large companies with more than 10,000 employees or more than EUR 1 billion turnover

“The top 10 business partners account for 37 % of global sales. Where do they develop and decide on their IT strategy?

These are the next steps:

- SEL transfers the result of the contact partner query directly to the Sana eOne cooperation portal, where industry business partners can in the future maintain and update their contacts.
- SEL meets the internationalisation requirements, among other things through the newly-created position of **General Manager Strategic & International Procurement (GM SIP).** The latter together with Strategic Purchasing assume responsibility for shaping and designing national and international purchasing volumes.
- SEL is co-founder and operator of the Healthcare Content Data Portal (HCDP) master data initiative. It is based on the internationally-established data formats and is also connected to the Global Data Synchronisation Network (GDSN)[3].
- SEL has concluded a framework agreement with GS1. The common goal: to establish standards more strongly in the healthcare sector and improve stakeholder interaction through a common “language”.

When thinking about
the future we also think internationally

What is the business partner‘s responsibility for e-HCSC[1] within the company? We asked about specific contact persons. Our findings weren‘t surprising, but are important for cooperation: The larger and more international the company, the more differentiated the national and international responsibilities.

If we want to make great strides forward as regards digitalisation, then what is needed are experts and decision-makers on both sides who communicate on an equal footing. These include:

- the global IT management (CIO)
- the national IT management or the decision-makers of the respective business units

Also, those responsible for these individual topics:
- Master data management, i.e. product master data with logistical information
- Content management, i.e. enhancement with classifications, add-on product information
- e-Procurement from the order through to the e-invoice
- Analytics and reports, including Healthcare Sales Reports (HCSR)[2]
- Marketplaces and B2B webshops

The parties involved in e-HCSC must be clear about these key positions and the respective responsibilities – especially when international teams tackle topics together.

[1] **e-HCSC** (e-Healthcare Supply Chain): For Sana Einkauf & Logistik this includes all IT solutions used to optimally support the flow of goods, information and communication within business processes between cooperation partners and business partners.

[2] **HCSR** (Healthcare Sales Report): a uniform format to simplify and reduce the sales reporting formats on the market. The goal: standardised digital sales and turnover reporting, reduction of cost and effort for the industrial partners (www.hcsr.de).

[3] **GDSN** (Global Data Synchronisation Network): international GS1 standard for data pools that enables the exchange and synchronisation of article master data between trading partners worldwide.

SAP **29.1 %**
Microsoft **11.6 %**
Oracle **11.6 %**
Own solution **4.7 %**
Infor **3.5 %**
QAD **3.5 %**
Other **36 %**

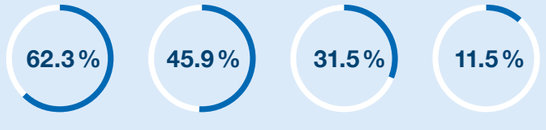
MDM systems of business partners – diversity and potential

What solutions do business partners use to manage their product master data? Mainly **established standard solutions.** However, only a very small proportion of companies rely on genuine MDM solutions[4]. This is also reflected in the results on data governance.

Data quality should not be left to chance. However, **more than 72 % of business partners have not established a system that reflects data governance in the area of product master data.** More than 30 % of the business partners surveyed currently have no clear formal guidelines for data governance. As a result data is stored in various IT systems that only contain a fraction of the needed information, e.g. logistical data.

Building contemporary solutions for Master Data Management requires investment – human and financial. This is particularly challenging for small and medium-sized enterprises. In view of new regulatory requirements (e.g. through the Medical Device Regulation and the UDI) as well as increased requirements from hospitals, MDM projects are indispensable. Companies can benefit from modern and scalable MDM cloud solutions. These already cover many of the requirements as standard.

Major challenges in the area of article master data for industry business partners



ⓘ **Only just under a third (31.4 %) of business partners have a digital asset management[5] system to store images and product data sheets. More than half use network drives for this.**

[4] **MDM** (Master Data Management) refers here to the sum of the strategic, organisational, methodical and technological activities in relation to the article master data of a business partner, including the logistical data. The objectives of these measures are:
1.) optimised and secured data quality and 2.) cross-application data consistency.

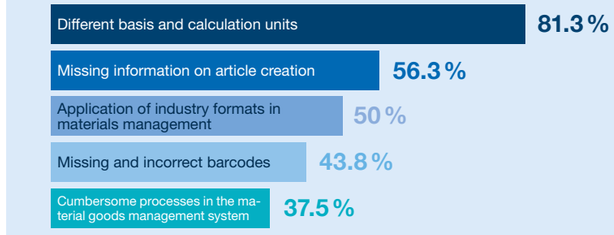
[5] **Digital Asset Management** refers to software applications for storing and managing any digital content, in particular media files, such as graphics, videos, music files and text modules.

ⓘ **HCDP – Healthcare Content Data Portal**
The purpose of the common master data pool of the group purchasing organisations is to enable business partners to supply their validated product master data as easily as possible. The data is made available to all affiliated purchasing organisations via an upload portal. www.hcdp.eu.

Master data quality – improved uniform validation

Digital product information will be a must-have in the healthcare sector in the future. However, administering it involves time and expense. **Business partners see the greatest challenges** for the management of digital product information in the creation of a central data master as a **single source of truth** (62.3 %). A further 45.9 % cite **data quality** and 31.5 % see the **automation of manual processes** as major challenges.

Challenges for the cooperation partners in price and regular maintenance

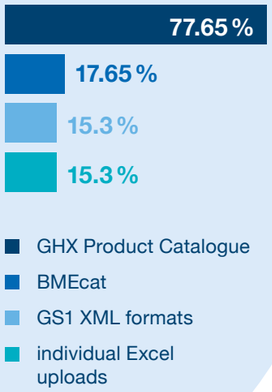


The challenges become problems in hospitals: Defects in the basis and calculation units, missing article information on article creation as well as incorrect or completely missing barcode information are most commonly mentioned. Another difficulty is that hospitals also (have to) configure their own basic units. This results in further conversion errors.

For the electronic procurement of a product, information is needed. This information includes identifier, such as the GTIN barcodes, as well as logistical features. They are the prerequisite for automated procurement processes with logistics, e-invoicing and medical quality assurance. With the **COVIN rules**[6] for checking master data quality, we are creating industry-wide minimum standards for article master data in conjunction with the purchasing groups.

[6] **COVIN** (Content Validation Network): Together with other purchasing organisations and industry committees, we are working on this cross-system and industry-wide uniform healthcare standard. The COVIN rules contain test methods for data validation. All the master data imported into the Healthcare Content Data Portal has to undergo these tests. The COVIN table is publicly available. Industry business partners can use it to increase data quality. (For information on COVIN and HCDP: www.hcdp.eu).

Catalogue templates used for supplying article data



Provision of product master data – systems and formats

The majority of business partners provide article catalogues through e-procurement platforms or content portals. The GHX platforms (73.5 % of all business partners surveyed) and the HCDP (66.3 % of the BPs) are firmly established. The independent GS1 GDSN network supplies only 13.25 % of participating companies with their data. Compared with other sectors, GDSN is therefore significantly behind. It remains to be seen whether it will establish itself as a standard in the healthcare sector.

The formats for the delivery of article data are mainly the GHX product catalogue (77.65 %), the BMEcat (17.65 %), GS1 XML formats (15.3 %) and individual Excel uploads (15.3 %). GHX has as the leading format become the virtual standard. Sana Einkauf & Logistik supports the use of the established formats. The use of individual Excel solutions is declining.

Positive: The cooperating hospitals have not only identified the problems, they are also working on their solution. The survey participants cite these master data projects for 2021:

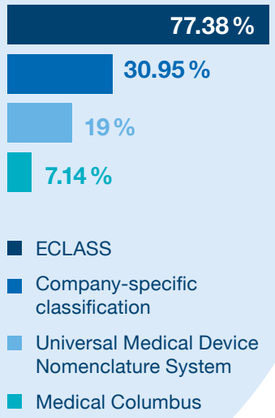
- Optimisation of the product master data and product group structure
- Use of the current ECLASS version
- Synchronisation with Sana data and expansion of the classification system, including Sana product-group classification
- Addition of barcode information for all products
- Checking and setting up interfaces between e-procurement providers and enterprise resource planning systems
- Barcode usage for third-party deliveries, such as implants and cardiological consumables, some of which are also managed on consignment
- Improvement of the sustainable data quality – at suppliers and in own systems

These are the next steps:

- The HCDP provides an adequate master data solution. More than 250 business partners are already using it.
- Since the established formats will no longer be adequate in the future, SEL is working with other purchasing organisations to develop an independent and generic catalogue format for efficient data provision – e.g. via HCDP.
- The launch of the Sana ePIM[7] is imminent. With this app, cooperation partners will benefit from:
  - validated/classified product master data
  - modern search algorithms
  - added value information for hospitals and flexible ways to distribute the data into the material management systems
  - support for common data export formats
  - the ability to maintain add-on information for product recognition
  - of the stored Sana product-group classification system (SWT).

[7] **Sana ePIM:** SEL's electronic product information management system goes into operation in 2021. It manages all the purchasing-relevant master data for 3 million articles in one central location.

Distribution of classification standards



Classification – arranging master data

Classification systems are an important tool in hospitals. By grouping articles together, they reduce complexity for users and buyers, and provide the basis for efficient master data usage. The grouping of all articles by each individual hospital, however, involves an enormous amount of work. Industry standards can help here. What about their dissemination?

More than 77 % of participating business partners and 60 % of collaborative hospitals claim to classify their articles according to ECLASS[8], followed by the Universal Medical Device Nomenclature System (19 %) and the Medical Columbus product classification system (7 %).

There is **strong market penetration by ECLASS** in several product portfolios. Nevertheless, 30 % of all suppliers – and more than two-thirds of hospitals – maintain a company-specific classification system, such as the Sana product-group classification system.

61 %
of the participating cooperation partners are very interested in the use of the Sana product-group classification system.

These are the market trends:

19 % of business partners plan to classify their items according to ECLASS.

More than 40 % of business partners would like the current ECLASS version to be used in standardised bidding procedures or as part of public tenders (VgV).

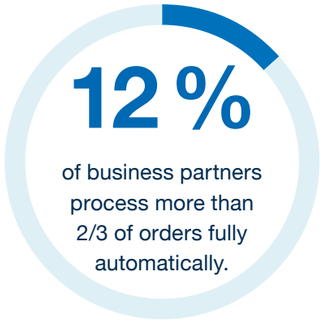
The practical usability of ECLASS in hospitals varies according to the respective product area. Sometimes the classification is too fragmented, and sometimes too imprecise. Even if not all the characteristics are relevant for end customers, their maintenance involves a great deal of work for all business partners.

These are the next steps:

- Besides ECLASS, a product-group classification system is needed that keeps pace with the industry's speed and innovativeness. It must be structured in such a way that it can meet the requirements of the Hospital Accounting Ordinance (KHBV).
- Sana Einkauf & Logistik is contributing ideas and technical input from the users as a member of the steering committee and in the ECLASS specialist group.
- SEL is creating on the basis and in addition to ECLAS the Sana product groups with a four-step classification system. This new structure with around 430,000 negotiated items will be made available at the launch of the Sana ePIM.

Classification of the product master data supports hospitals:
- **as an organisational tool,**
- **with identifying equivalents or product alternatives,**
- **with product and material cost control.**

[8] **ECLASS:** a data standard for classifying products and services using standardised ISO compliant characteristics (www.eclass.eu/).



e-Procurement – Efficiency with platforms

The majority of business partners hold contracts with established e-Procurement service providers in order to receive and process orders electronically via EDI. The leading provider is GHX, followed by Pagero HBS and GSG. As regards hospitals, over 85 % of respondents use GHX.

However, only 12 % of the business partners surveyed process more than two-thirds of orders fully automatically in the material management systems. What is striking here is that business partners who work with one, or better more, e-Procurement service providers achieve a significantly higher automation rate. Despite EDI, however, there is still room for improvement.

More than 60 % of business partners estimate the post-processing costs for EDI orders[9] to be medium or high. The reasons lie in incorrect master data, incorrectly maintained prices as well as non-standardised special processes, for example for consignment deregistrations or reorders. Errors in data transmission via the established and partially outdated interfaces were mentioned as a further reason. The results confirm SEL's strategy to use the existing e-procurement solutions more efficiently in the first step with clean master data.

These are the market trends:

e-Procurement platforms are the catalyst for the introduction of electronic and fully-automated processes in hospitals. In order to exploit their high potential, other hospitals and business partners must consistently use the established standards and solutions in data transmission.

The high automation potential becomes achievable with high master data quality in hospitals, continuous comparison with the item and price information of the purchasing group and better networking of the actors in order to reconcile process and interfaces.

How will clinics access product and price data and place electronic orders in the future? Are the existing material management systems still the right way forward?

In the future, e-procurement will need to be deployed earlier, in the hospital's internal ordering portal, either in a requirements system or a digital marketplace. Users in hospitals are accustomed to other ordering processes from their private lives. This expectation, combined with staff shortages and increasing cost pressure in hospitals mean that fax orders are becoming obsolete.

These are the next steps:

- Standardised procurement processes, such as those systematically set up by Sana General Hospital Supply (GHS/KVV), are key to efficiency and scalability. In the GHS/KVV hospitals with a high proportion of modular supply items, standardised electronic ordering and logistics processes can achieve considerable optimisations for all involved.
- The added value in hospitals is only created by qualified back documents such as order confirmations (ORDERSP), delivery notes (DESADV) and e-invoices (INVOIC). The Sana Network e-HCSC continues to drive these developments forward. It shares the knowledge from the onboardings of business partners in general hospital supply.
- In addition, agreement is needed in the healthcare sector on the exchange of order data and back documents between the e-procurement providers (roaming). A supplier monopoly must not slow down automation.

[9] **EDI:** Electronic Data Interchange

Do you need more information about e-invoicing? If so, register now for our TransForm E-Invoicing Online Seminar on 22 June 2021. Registration is via the Sana eOne cooperation portal (www.sana-eone.de/events).

Sana Einkauf & Logistik is organising further online seminars on the topics of master data, e-procurement and GS1 standards in hospitals.

These are the next steps:

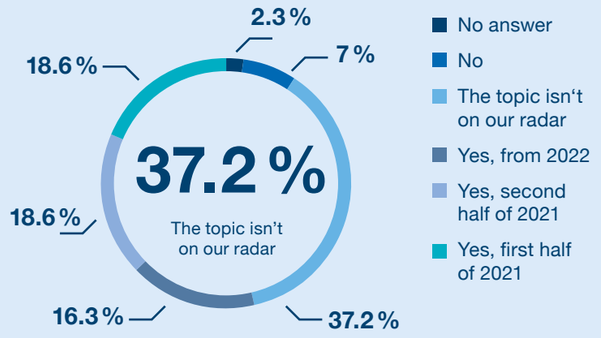
- Sana Einkauf & Logistik is supporting the efforts to introduce electronic invoice formats and will share the results with the industry associations.
- SEL General Hospital Supply already works with e-invoices. SEL is sharing its own experience of introducing the ZUGFeRD format with cooperation and business partners. From September 2021, a knowledge database on e-invoicing will be available to hospitals and business partners in Sana eOne. It provides information on formats, contact persons and answers numerous FAQs.

The e-invoice arrives late

According to an EU Directive published in 2014, contracting authorities had to be able to process electronic invoices by November 2020. With the introduction of fully electronic invoice formats, all the involved parties expect automation in the invoicing process to be boosted. But can the industry also deliver?

Only 52 % of the business partners surveyed can today supply electronic invoices, i.e. machine-readable documents. Simple emails with pdf attachments do not meet these requirements.

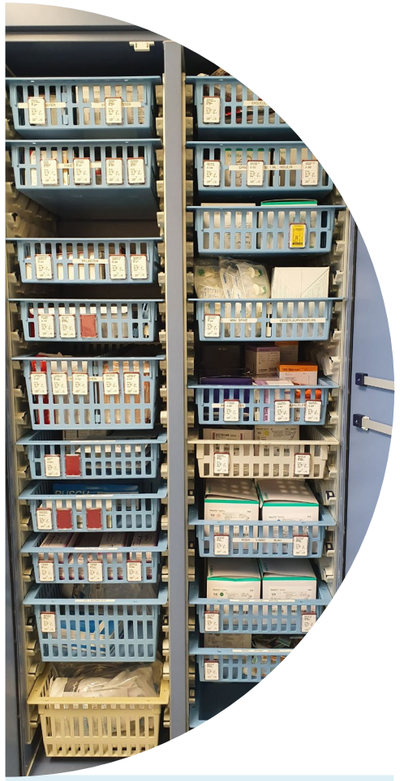
If not yet introduced, do you as directors plan to introduce fully electronic invoices?



What stage are the business partners who haven't yet introduced e-invoices currently at? Around half of them are planning to introduce e-invoicing in 2021 or 2022. The others don't yet have a specific timetable for it. How they will invoice public health institutions in the future remains unclear.

24 %

of business partners operate an individual webshop.



Marketplaces and webshops – simple and transparent

According to our survey, only a few business partners operate an individual webshop (24 %). One third of the participants nevertheless consider a webshop to be an important part of distribution.

At first glance, this is surprising, because the majority of collaborative hospitals (71 %) already use webshop solutions for defined portfolios (including office, nursing, laboratory and business needs as well as HVACR and technical equipment). Almost 60 % of them expect webshop turnover to increase or sharply increase in the future.

↑ These are the market trends:

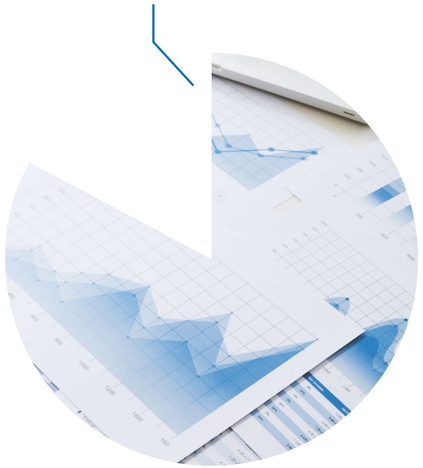
Upon closer inspection, it becomes clear that users are shifting towards cross-supplier marketplaces. Over 83 % of online hospital buyers use Amazon, 25 % Mercateo and over a third assortment-specific webshop solutions, such as for office supplies.

Marketplaces are particularly in demand for the medical B/C product range of small and medium-sized business partners. Important reasons for their use include straightforward processing, a wide range and transparency as regards availability and delivery time.

The potential to reduce process costs in C-item purchasing is enormous. The use of marketplaces with modern punch-out interfaces allows for integration into materials management without media discontinuity, combined with a shopping experience that users have long been accustomed to from their private lives.

Over 83 %

of the surveyed decision-makers from collaborative hospitals are interested in a BI solution.



Material costs – the pressure remains high

The demand for consulting services with solutions for evaluating products and material costs is high. **More than 83 % of the decision-makers surveyed** from the collaborative hospitals are interested in a BI solution based on material management data. They want to use the solutions to make analyses, reporting and their visualization user-specific. Above all, they want to have access to the solutions at all times in order to be able to take into account changed working conditions.

Highly scalable solutions are needed here that do not consider the material costs in isolation. Only in conjunction with the performance data is it possible for changes to be correctly assessed. Likewise, the financing of medical devices with New Diagnostic and Treatment Methods (NDTM) and Central Purchasing (CP) is becoming increasingly important for the control of medical supplies and medicines. The respondents' summary view is as follows: In addition to connectivity to materials management, over 80 % would like to see linkage to performance data, information on financing, and comparative metrics with other healthcare facilities in a BI platform.

The results of the surveys are also confirmed by the great interest in the Sana material-costs benchmark that takes place within the framework of network controlling. Over 70 facilities from the purchasing cooperation supply performance and financial data and receive benchmark results at department level in return.

These are the next steps:

Strategic Sana network controlling began on a new level in May 2021: The participating hospitals can now use a completely new analytics solution in Sana eOne. There they will find:

- evaluations tailored to their company, including benchmarks in an analysis cluster of comparable hospitals,
- comprehensive KPIs at department level for identifying potentials and strengths in the areas under consideration,
- a report and an alternative Excel export for the further processing of the underlying data in the hospital.

Current contribution to material cost control: Verena Hafner/Sebastian Körner/ Manfred Siegert: Material cost control. Talking about cost and performance, in: f&w, Issue 5-2021, p. 444.

Over **71 %** of all respondents say that they are very satisfied with the Sana eOne cooperation portal.

Cooperation
is digital collaboration

How do respondents view the Sana eOne digital cooperation platform? More than 71 % of all survey respondents expressed large satisfaction with the Sana eOne cooperation portal.

However, they still provided many useful suggestions as to how it could be improved. This included more transparency on savings effects through liability reporting on the part of the clinics, combined with BI solutions. Also desired is the possibility of digital liability control on the part of business partners and cooperation partners.

ⓘ What Sana eOne can do:

- The Sana eONE cooperation portal is the focal point of our digital world. This is where our partners can find all the functions and data as well as support for essential purchasing processes.
- Cooperation partners can digitally secure and check best prices and participate in procurement procedures. In addition, there are state-of-the-art analytics solutions for controlling material costs and benchmarking within the framework of Sana network controlling. Feedback on product portfolios, business partners, Sana events and other current topics is obtained via a survey module. In the Sana Newsblog all users receive up-to-date information.
- Business partners will find in Sana eOne an overview of all Sana cooperating hospitals as well as the corresponding volume forecasts from the group. Business partner contacts can be maintained directly in Sana eONE and are therefore always available to everyone.

⇨ These are the next steps:

- The systems for electronic sales reporting via the uniform Health Care Sales Report (HCSR) format are already in the test phase at SEL. From the end of 2021, HCSR data can be provided directly in Sana eONE via an upload portal.
- Other functions required by business partners and hospitals in the survey, such as a monthly sales report for business partners, the extension of liability reporting to all purchasing areas including pharmaceuticals, and the import of master data independently of e-procurement into in-house materials management are already part of the roadmap.

“

Hospitals by themselves will not be able to cover all areas of digitalisation. The WE is the crucial factor here: the close and cooperative cooperation of business partners,cooperation partners and SEL. It provides the basis for creating scalable platforms and processes that are sustainable and future-proof.

Advellence Solutions AG
Implementation of the Sana ePIM based on the Riversand MDM solution

Bayard Consulting Group
Implementation and further development of HCDP on the basis of of the SyncManager

Prodware Deutschland AG
Implementation and further development of Sana eOne based on MS Dynamics

Sana IT Services GmbH
Provision of IT and infrastructure, in particular for Hospital Full Care and Analytics

Sana Einkauf & Logistik would like to thank the IT service providers for their dedicated cooperation.

Big steps –
let‘s take them together!

Patient care needs support from purchasing and logistics. This in turn calls for rapid progress in digitalisation.

WE need the following in purchasing and logistics now:

- **Product master data –** validated and standardised
- **Classification standards** – which reflect the different requirements of hospitals
- **e-Procurement** – based on uniform standard formats, interoperable and without media discontinuity
- **E-invoices** – as a working solution
- A **roadmap** based on the world‘s leading IT solutions, cloud-based – for future security, innovative strength and interoperability

SEL expects the following from innovative market shapers:

- Create the prerequisites for master data quality – this ensures our cooperation!
- Support industry solutions (HCDP, HCSR, COVIN) – isolated solutions have no future!
- Send us e-invoices – we can handle them!
- Drive forward the implementation of the IT roadmap now – WE are either the brake slowing digitalisation down or the motor driving it forward!

A survey can never take into account all conceivable questions. All involved parties – business partners as well as collaborative hospitals – need to honestly answer two further questions:

1. How do **WE** plan to shape the electronic trend in the supply chain?
2. How can **WE** shape the electronic trend in the supply chain with our own resources?

The answers to these two questions will vary. One thing is certain, however: Strategic decisions and implementation strength are needed to overcome the fundamental challenges of digitalisation.

Cooperation.
Digitalisation.
Future.

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2021-02-E