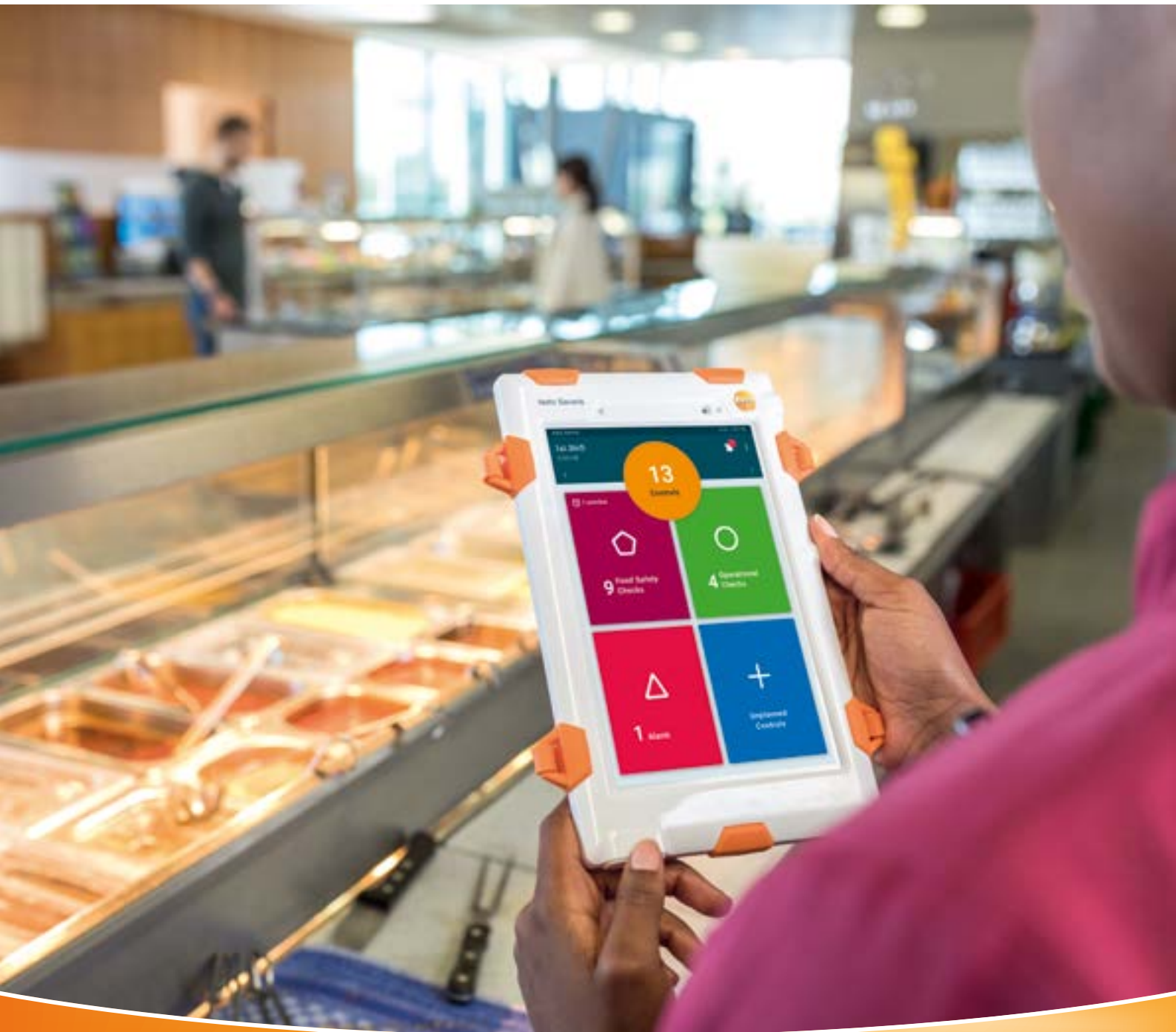Be sure. testo

The advantages of digital quality checklists
for ensuring food safety.

In the increasingly automated world and the current phase of digital transformation, the demand for the elimination of pen and paper is not new. In the retail and food service sectors, food businesses are under pressure to increase their companies' turnover and simultaneously to guarantee the food safety of their products. Reliable staff on site in the restaurants and supermarkets are crucial for the implementation of the food safety system defined by the company. However, according to a survey of the sector conducted by Alchemy Systems, over two thirds (67 %) of food service businesses responded that not all of their employees comply with their food safety procedures. The main reasons for this are insufficient training and lack of understanding of food safety practices among the employees.[1]

In order to lead and support staff in the implementation of and compliance to food safety, checklists and work instructions help in carrying out the right steps. A good checklist ensures that no process steps are missed out, and at the same time serves as proof of compliance with the process. Not all checklists are equal, however, as Eric Moore can report from his 20 years' experience as a food safety professional at numerous industry-leading food service and retail companies. "I have spent countless hours over the years creating and revising paper-based temperature logs and checklists designed to help manage essential food safety requirements. As a food safety professional, I took great pride in designing these documents. However, no matter how simple and slim I designed the paper documents, there were always challenges to getting operations to use them. While visiting locations I often talked to employees and supervisors about the importance of the logs and checklists, but more importantly I asked questions about the challenges of using them. They gave me truly valuable insights into why as long as I had to rely on paper-based records, the food safety program would have limited success."

[1] https://2nw8azuc9892cezwr452b2x1-wpengine.netdna-ssl.com/wp-content/uploads/2018/03/Global-Food-Safety-Training-Survey-2017.pdf, retrieved 09.09.2019.

About Eric Moore

Eric Moore is the "Director of Food Safety and Industry Relations" at Testo North America. For the last 20 years, Eric has been a proactive leader in improving the food safety education, policies and procedures at multiple industry-leading global food service and retail organizations.

In the course of his career, Eric Moore has gained various industry certificates and memberships. He has been CP-FS certified since 2005, and since 2012 has been an active participant and committee member of the Conference for Food Protection (CFP). Eric Moore is a Food Safety Preventative Controls Alliance and HACCP qualified person who has been certified by the National Sanitation Foundation International (NSF).

As a member of numerous working groups in the Global Food Safety Initiative (GFSI), GS1, the American Frozen Food Institute (AFFI), the NSF International Joint Committee, the National Restaurant Association Educational Foundation, the National Environmental Health Association (NEHA) and Prometric, he has made his expertise available for the development of standards, guidelines, education and training curriculum and examination contents on the topic of food safety.

Eric Moore is currently Vice Chairman of the Retail and Food Service Professional Development Group in the International Association of Food Protection (IAFP), Chairman of the CFP Sponsoring Committee and a member of the Association of Food and Drug Officials (AFDO) Industry Associate Committee.

At Testo North America, Eric Moore is responsible for the organizational management and consultation of all topics in the field of food safety, monitoring all aspects of compliance and regulations.

The top 3 disadvantages of paper-based food safety systems.

1. Lack of employee support

When a food safety process prescribes cleaning a surface or checking the temperature of a deep-freezer, for example, paper-based checklists contain only the steps to be carried out and the time at which they must be finished. However, they provide no guidance of which special factors need to be observed during the checks, and which corrective actions for deviations are prescribed. Deviations or problems can occur, such as the violation of upper or lower temperature limit values. These then need to be documented on paper, and action is often only taken days or weeks later. In addition, the employees can only make handwritten comments, which can lead to misinterpretation, depending on the handwriting. Paper-based checklists also provide no possibility of visual documentation, e.g. in the form of photos. These however, would in many cases considerably simplify the documentation.

2. Manipulation and pencil whipping

If there is only low interest in the completed checklists, and they are only looked at when an audit audit is scheduled, then this can lead to the staff's questioning the purpose of the documentation. As a result, the lists are filled in incompletely and without enthusiasm. The appreciation of the relevance of the compliance-relevant task and their completion on time is increasingly lost. It is not uncommon that the checklists for the entire weekend are already filled in on Friday, or that missing entries are completed later when an audit has been announced. Employees have the feeling they are documenting everything simply for the audit and not for the safety of the consumer.

3. Time-consuming analysis

It is not just finding and filling in paper checklists which needs a lot of time and effort. The analysis of completed checklists is also time-consuming and requires valuable management resources. Analyzing possible weaknesses in a restaurant or store and gaining an overview over the overall status of the food safety system is very complex using paper-based documentation. The same applies to the comparison of individual sites with each other (benchmarking).

The top 10 advantages of digital food safety procedures.

1. Modern working environment

A digital system makes a considerable contribution to a modern working environment in your company. Staff can identify more easily with the compliance-relevant tasks and enjoy carrying out the tasks digitally.

2. Compliance

The change from paper-based to digital checklists opens up new possibilities and advantages for your food company in terms of providing evidence of compliance. The implementation of digital food safety procedures supports your staff in carrying out their work, by providing detailed instructions and operating recommendations.

- Is the employee about to miss a compliance-relevant task?
  The system displays the open checklists by shift and notifies the employees if jobs are overdue.
- Does the staff member not know how to carry out a process step?
  The system enables the provision of detailed instructions including visual images.

- Is the employee trying to skip a process step?
  The digital system insists on completeness. Processes can only be successfully finished with an uninterrupted documentation.
- Is an entry outside the specification defined by you?
  The system shows the deviation and the required corrective actions, and guides the staff member through their implementation. Thanks to this kind of instructions, a digital system can promote consistent and appropriate behaviour in the interests of food safety while ensuring compliance.

3. Easy implementation

In many restaurants and supermarkets, it is the manager who documents the completion of the compliance tasks, as the checks are too important, or can be too advanced for a new employee. This ties up cost-intensive personnel resources in every location. With well-designed digital checklists which are easy and intuitive to work through, even lower management team members can carry out and document the processes correctly. This allows you to deploy your workforce in the company in a targeted way and to operate more economically.

The top 10 advantages of digital food safety procedures.

4. **Customer satisfaction**

With the introduction of an intelligent digital checklist system with automatic temperature monitoring, your staff have more time to concentrate on their core tasks and your customers' satisfaction.

5. **More space and no storage costs**

When your company switches to digital checklists, the space is freed up which was otherwise needed for storing the documentation. With data storage in a secure Cloud, piles of paper and the sorting and storage of folders is unnecessary. All storage costs for the paper-based check-lists are eliminated.

6. **Comprehensive documentation possibilities**

With digital checklists, visual documentation such as pho-tos is possible. This additional possibility simplifies many work steps enormously, reducing time and complexity.

7. **Extensive analysis and easy reporting**

A digital quality management system allows you not only to implement checklists digitally, but also offers exten-sive analysis functions for the recorded data. Viewing and interpreting the results is considerably simplified, since all information is presented in a collated and clear overview and can be called up at any time. This means you can ope-rate proactively and to further develop your system exactly according to your needs.

8. **Updates at the touch of a button**

When individual process steps in food safety procedures change, or limit values are altered, digital checklists can be updated at the touch of a button. This allows you to ensure that all stores work with the updated checklists from the point in time defined by you, as the old versions are no lon-ger available. All storage costs for the printing and dispatch of updated checklists are eliminated.

9. **Improvement and training potentials**

With a digital food safety system, you can see at a glance which compliance-related tasks are frequently subject to errors or difficulties in the outlets. You see which outlets require assistance in implementation, without needing be on site to look manually through the results recorded on paper. This allows you easily identify problem areas and stores. With this information, the training requirement for certain processes or affected locations can be derived and imple-mented, in order to ensure that every staff member under-stands and adheres to the food safety practices.

10. **Data access and records**

In addition, it is much easier to organize, file and access digital data records. To do this, you do not need to view the floods of paper on site in the restaurant, but can access the data conveniently via an internet access. This enables you to prove compliance faster, in more detail and with a greater level of responsibility.

Eric Moore: "I truly feel that technology-based solutions are the missing ingredient that food safety program managers in retail and foodservice industry have been in search of for years. It's our responsibility to protect our customers health and to do better. Technology is the key to our industry's success in preventing unnecessary foodborne illnesses by providing the right tools that enable an effective way to measure results, react faster, and make continuous improvements."

More expert knowledge.

Find further information on the topic of food safety in our white papers or at
www.testo.co.za

Digital solutions for food quality management: An impressive return on investment.

>> to the white paper

The food waste challenge: Increase sustainability and reduce costs.

>> to the white paper

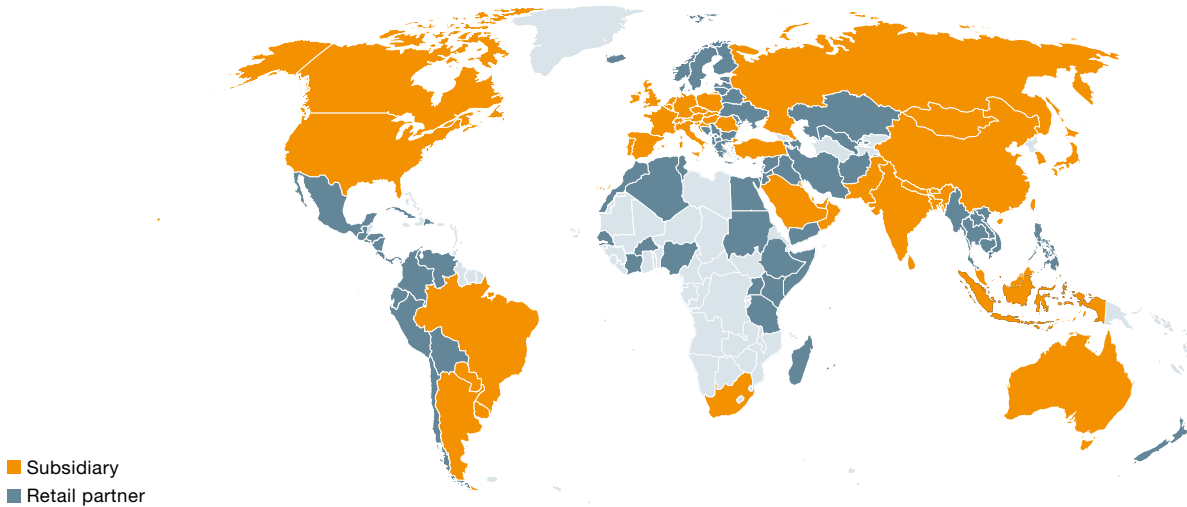**First Expired – First Out:** Improve food quality and reduce costs with the FEFO method.

>> to the white paper

Measuring correctly: Determining air and product temperatures of food accurately.

>> to the white paper

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About us: Introducing Testo.

■ Subsidiary
■ Retail partner

Testo, with its headquarters in Lenzkirch in the Black Forest, is a world market leader in the field of portable and stationary measurement solutions. There are 3,000 employees involved in research, development, production and marketing for the high-tech company in 34 subsidiary companies all around the world. Customers all over the world are impressed by the measuring technology expert's high-precision measuring instruments and innovative solutions for the measurement data management of the future. Testo products help save time and resources, protect the environment and human health and improve the quality of goods and services.

In the food sector, measuring instruments and monitoring systems from Testo have proven themselves for decades, and belong to the standard equipment of food services, supermarkets and food producers.

An average annual growth of over 10% since the company's foundation in 1957 and a current turnover of over a quarter of a billion euros clearly demonstrate that the Black Forest

and high-tech systems are a perfect match. The above-average investments in the future of the company are also a part of Testo's recipe for success. Testo invests about a tenth of annual global turnover in research and development.

For the food sector, Testo has developed specific solutions which combine precise sensors with intuitively operated software and comprehensive services, tailor-made for the requirements of the respective field.

Testo South Africa supplies most of the food manufacturers, major retailers and restaurant chains in South Africa with food safety measuring devices.

Testo SA is your partner in food safety instrumentation: food thermometers, cooking oil testers, pH meters, data loggers, wireless data monitoring systems and SANAS accredited calibrations for temperature and humidity.

More information at www.testo.co.za

www.testo.com