

# Do Organisations Need Traceability?

## Executive Summary

Business traceability is fast becoming a basic requirement for organisations in all industries. Traceability provides increased visibility to business information within an organisation and transparency to business processes. Organisations increase the traceability of their business data in order to identify process inefficiencies, increase data security, meet changing customer expectations, and increase employee responsibility over the data that they record and need visibility to business information to improve information communication.

Implementing traceability involves extensive documentation and processing systems that are best handled by electronic solutions. Any electronic solution selected must generate useful information and meet numerous traceability requirements including accuracy, completeness, timeliness, accessibility and presentation.

One electronic system that meets all these requirements is InformationLeader. The software solution has been designed from the ground up with traceability in mind to ensure that your business has the visibility to enable all the benefits that traceability can afford your organisation.

## Defining Traceability

When considering business traceability it is important to view users of the business data as 'information customers'. Like retail customers, information customers have different needs and as such may have quite different definitions for traceability. For example, a senior manager would need a summary of employee timesheets and expenses while a floor manager would require more specific information about what projects individual employees have been working on in order to identify inefficiencies and calculate invoices.

With this in mind, traceability can be generalised as a property that provides increased visibility within the information customer's scope, and provides transparency to business processes.

Traceability and its importance to businesses in all industries is a concept that is gathering ever greater attention. Mass product recalls, highly publicised accounting scandals, and disease outbreaks related to fresh produce have forced organisations in all industries to review their existing business processes and determine if they have an adequate level of traceability. Regulatory pressures, changing customer expectations, and pressure to increase efficiency from foreign competitors provide more immediate motivation.

This paper examines the business reasons for traceability and examines how electronic data management systems can improve traceability within an organisation. It highlights potential reasons for traceability, and finally how traceability can be achieved through information systems.

## Justifying Traceability

For regulated industries such as red meat and pharmaceuticals, a high level of traceability is required by law. What benefits are there for businesses in unregulated industries?

It is important to realise that traceability is not only focused on product recall and avoiding business record related scandals. There are numerous key benefits gained when enhancing business traceability, and they will be explored in this section.

One key benefit is the potential to improve the efficiency of business processes and increase output quality. Collecting business information allows analysts to identify key areas for improvement in the business process, streamlining activities and reducing costs. A traceable business process provides complete visibility to managers and allows for performance analysis that can be the basis for efficiency gains.

Enhanced traceability can lead to improved information security. Information trails and monitored business processes can control the access of information and track any illegal movements. Transaction tracking can mean that each interaction with the system can be tracked back to individual users. This increases accountability and responsibility over the business data for all information customers.

Further responsibility over business data can also be implemented through electronic signatures. The act of electronically signing a form can be part of the business process and lock down the data to ensure that there is an appropriate level of accountability and confidence that the data cannot be changed after sign off.

Other benefits a business could realise through traceability systems include after sales applications, proof of quality and proof of origin applications, as well as logistics applications. For low volume, highly configurable products (such as complex software systems, and large, specialised machinery), capturing and tracking production and implementation details can help with after sales service. This can increase customer satisfaction and help with customer relationship management.

Collecting and reviewing traceability data has the potential to minimise the impact of negative events such as product recalls. If a recall has to be performed, traceability information will help the organisation limit the recall to specific lots or batches of product instead of a general product recall. The traceability information can also be used to settle liability claims. Detailed information could determine that the fault could lie at another part of the supply chain i.e. with the raw materials supplier or the retailer.

## Implementing Traceability

Traceability can be implemented through documentation. Documentation based traceability involves capturing product and process information through records that are stored and maintained for business analysis.

Many organisations try to capture this information with a complex and cumbersome collection of ad hoc and often incompatible electronic and paper based systems. These

configurations invariably fail due to extremely high maintenance requirements and the multiplication of inefficiencies in each system. What businesses require is a way to centralise and consolidate their information, and to implement a fully traceable data management system that meets all the requirements for presenting useful information.

One such system is InformationLeader. InformationLeader is a platform for the electronic management of traceable data. It has been designed from the ground up to offer a level of traceability appropriate to the information customer. The system focuses on business transparency, awareness, and providing the most useful information to the right people at the right time.

Electronic systems must be capable of handling numerous traceability requirements. These requirements can be split into two categories: information quality and accessibility.

Information quality can be divided into the following elements:

- **Accuracy** – this element defines the extent to which the captured information is correct. This is accomplished in InformationLeader through validation at the data entry stage via customisable alerts that can notify users if their information falls outside set business requirements.
- **Completeness** – Electronic systems can enforce the completeness of data through data validation when storing electronic forms, ensuring that all the required information is present prior to storage. InformationLeader's business process control system allows multiple people to work on electronic forms, and a workflow process that ensures that information is complete before being signed off.
- **Age** – The age of information can greatly impact its usefulness. Electronic systems focused on traceability automatically 'stamp' each piece of information with the date that it was entered or changed, ensuring that information customers instantly know if the data that they are viewing is current. InformationLeader automatically stores time and date information on each individual piece of information entered into the system, allowing information customers to instantly see the age of the information they are viewing.
- **Timeliness** – This refers to the latency between the time the information is recorded and the time an information customer can act on that information. InformationLeader has the capability to automatically alert specified information

customers when certain business rules are breached, or non conformances are identified. The system's workflow control feature allows for follow up dates and times, with extensive notification systems to alert relevant users of pertinent actionable events.

- **Source** – One important aspect of information is its source. Ideally, an electronic system would automatically track the source of all information entered into the system, allowing information customers to instantly identify the source of the data they are reviewing. InformationLeader goes beyond this requirement by automatically storing the name of the person entering information and retaining complete change histories at a field level. This means that information customers viewing the information can instantly see who filled in each piece of information, even when multiple people have been working on the same form.

Information accessibility is defined by the availability of relevant information. An ideal electronic system would be instantly accessible to authorised information customers. With a growing trend towards a more mobile workforce, businesses are increasingly turning towards internet based technologies to allow instant access to their data from almost any location. To control this access, electronic systems must offer a granular security model to ensure that authorised information customers can only access information that is relevant to them. InformationLeader's web based interface enables organisations to allow employee access from their homes or restrict it to their corporate intranet. The interface also allows users to access the system from mobile devices that feature fully functional internet browsers (e.g. UMPCs, web tablets). The system's security level allows administrators to restrict user access to specific parts of the system, with users only being able to access information that is relevant to them.

Another aspect of information accessibility is presentation. Many electronic systems can store and analyse immense amounts of information. Only few can quickly and intelligently present that information in a way that is useful to the information customer. The level of summarisation and the data format has a tremendous impact on the usefulness of information. InformationLeader's extensive reporting features provide organisations with complete flexibility over the level of information to be presented and the format in which the information is provided. These features combined with access controls ensure that information customers can view information in a way most relevant to their requirements.

## Conclusion

Traceability can provide businesses with the visibility required for a proactive approach in handling challenging situations. Electronic systems provide the accessibility and control necessary to manage the demands that implementing traceability in an organisation can bring. Any electronic system must have key features that will guarantee that useful information is captured at the right areas in the business process to ensure that businesses receive the maximum benefit from their investment.

InformationLeader provides businesses with a robust and mature feature set that has been tested in industries where traceability is a key requirement. Businesses can be confident that the system will deliver the visibility required for their systems, with the system's focus on traceability and flexibility to adapt to a wide range of business requirements.

For more information about InformationLeader and how it can help your business with its traceability requirements, visit the product website at [www.InformationLeader.com](http://www.InformationLeader.com).

## Disclaimer

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