Attribute

INTEROPERABILITY FRAMEWORK

For private companies, having a clearly defined and effective interoperability framework is of crucial importance. By utilizing an interoperable system, companies can benefit in many ways. From pulling data from multiple sources to improving marketing strategies, interoperability efforts are guaranteed to bring about advantages.

However, understanding how to implement your interoperability system along with its requirements can pose some challenges with factors including feasibility and your employee's approaches to its use. With all the tech jargon and interoperability barriers in place, things can get quite overwhelming and rather quickly.

In this article, we look to simplify the contents of what an interoperability framework should include so that you understand how to create your own and abide by the associated laws.

If you're looking to get clued up on interoperability compliance and would like further information on the details defining the framework, this article is for you. Moving forward, you'll have the confidence and knowledge needed to apply all aspects of the framework and abide by the setout guidelines.

What does the interoperability framework mean for businesses?

In software interoperability, different solutions communicate freely and easily with each other. Systems that are interoperable exchange information in real-time without requiring specialized IT support or complex coding.

Interoperability is a crucial factor in making a digital transformation possible for just about any private company. It enables administrative entities to exchange meaningful information electronically and in ways that all parties understand.

ISO/IEC/IEC 2382 Information Technology Vocabulary defines interoperability as "the ability to communicate, execute programs, or transfer data among various functional units with little or no knowledge of their unique characteristics" (ISO, 2000).

Simply put, interoperability allows systems to exchange data across organizational boundaries. This framework provides marketers with a more sustainable alternative to enterprise solutions through increasing collaboration and validated partnerships between vendors, and end-to-end marketing management solutions can proliferate as their benefits become increasingly appreciated.

No matter the industry your company is operating in, interoperability allows you to paint a full picture of the customer's lifecycle and their journey. It is this insight that feeds into autonomy and consequential success.

Which businesses benefit from interoperability?

The technologies that facilitate interoperability between companies and enable them to take advantage of various benefits are becoming more and more prevalent in the booming era of digital data.

Any business will benefit from facilitating interoperability, and already, many marketing and sales companies are demonstrating just how beneficial such systems can be.

Here are just some examples of the associated advantages:

1 ## Cohesive Information

Identifying and locating redundant data within systems operating in isolation facilitates smoother communication between them.

2 ## Enhanced Adaptability

Systems collecting information communicate with each other and move the detected data automatically and flexibly, adapting faster to changes.

3 ## Increased productivity and control

Data collected by the system is related to production, and it is managed in such a way that it is available to users with greater ease.

Almost any company can take advantage of these benefits if it applies system interoperability throughout its entire business process.

Making interoperability work for your business

An example of an industry that has benefited us all by embracing interoperability is the telecommunications industry.

When you call someone on the phone, do you worry about reaching them?
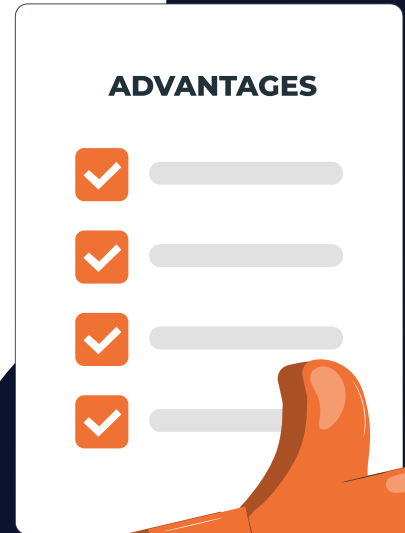
Regardless of which operator you choose, you assume that you will be able to communicate. This is an excellent example of how interoperability works.

There was a time when things weren't so simple. Previously, operators tried to restrict customers to their services, charging for calls made outside a particular network.

To move forward without falling apart, each network needed to communicate seamlessly with each other. This led to the creation of an interoperable telecommunications network.

While interoperability is a fairly new idea across some industries, it is certainly worth implementing if you want to make the most of your operations and potential revenue turnover.

With Attribute software, you can integrate your company's various systems (dialers, messaging platforms, social media, ads, lead vendors, CRMs, etc.) seamlessly and synergistically.

Semantic interoperability

Interoperability in terms of semantics refers to the ability to ensure that the precise meaning of exchanged information can be understood without ambiguity by other systems, services, or users.

Technical interoperability

Applications and infrastructures that link systems and services are covered in this section. Technical interoperability includes interface specifications, interconnection services, data integration services, presentation and exchange, plus secure communication protocols.

Companies have to deal with a large amount of data coming from a variety of sources. In this new environment, organizations have to make sure that their systems are interoperable. To leverage the benefits of Big Data, all systems need to communicate and understand each other.

Using such technology allows communication among interconnected systems to be more fluid. By automating the input and output of data, systems can be more efficient and adapt to changes faster, and by improving the user's access to data, productivity can be enhanced.

Interoperability in marketing and sales

You may have experienced the phenomenon of software interoperability while trying to simplify daily tasks and workflows.

Interoperability in software can also lead to a boost in sales as well as productivity. After all, this is the ultimate goal of any business, right?

When systems fail to communicate well with one another, it helps to look at the consequences. Perhaps you've already experienced this first-hand yourself.
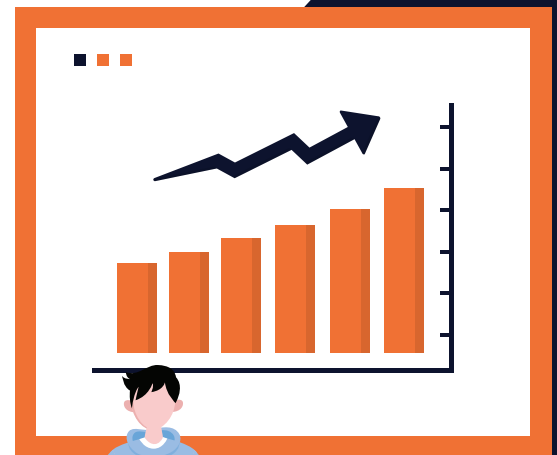
Wasted expenditures are the first concern. Software that has only one purpose and isn't integrated with other programs may sit idle for years before anyone notices.

According to The Workforce Institute, nearly half of employees wish their workplace technology worked like their personal technology. Over a third feel their jobs are harder than they should be due to outdated processes and legacy technology.

Tool use isn't the only problem. Compatibility issues also prevent collaboration. Many organizations are developing new ways of consolidating day-to-day software use by connecting disparate applications or streamlining different needs using one centralized platform.

A large number of online retailers use a single platform to manage marketplace listings, create ads and track orders simultaneously, instead of deploying separate sales, marketing, and fulfillment software.

Interoperability might be achieved by finding a platform that facilitates data collection, secures sensitive data and allows customer communication.

Your goal should be to find the solution that will work best for you and your teams regardless of the path you choose.

Employees might only need to ensure their existing tools are as integrated as possible if they are happy with them. However, a more comprehensive approach may be necessary if you're starting from the ground up or looking to revamp existing processes.

Either way, make sure any new tools you adopt in the future can be integrated easily and quickly with your existing processes to ensure interoperability and to reap the abundance of benefits.

Best practice for the interoperability framework

When it comes to best practices for interoperability, there are certainly some key points to take away.

Embracing a unified, interoperable platform allows for secure data activation across organizational boundaries in exchange for the current tech stacks of industry players.

Collaboration is highly valued in the world of addressable media, but if insights do not translate directly into compliant activation, they can be rendered useless.

Below, we've outlined some of the best practices for establishing your interoperability framework in business:

1 Clearly communicate your vision

People can work together towards a common goal when they have a clear shared vision. Limiting the scope of an application is essential for collaboration. Changing objectives are inevitable.

When an organization's vision changes, it is crucial to maintain a vision document. A vision document can be updated and employed in many ways to communicate developments. The document can be distributed and used as an aid to any project.

The idea of establishing a vision document per project is also a best practice example. When developing the report, it should be checked if the project vision contributes to the overall organizational vision.

2 Define specific objectives and goals

Application system goals should be maintained at the organizational level as well as the project level. Goals and objectives should be aligned with the organization's vision and should be measurable.

Application requirements can be determined if they are within the scope of a project by looking to see if they match the vision and goals.

3 Carry out measurements

It is imperative to include measurable goals, objectives, or application requirements when writing the overall vision or lower-level objectives. Measurement and verification ensure that they are met.

These include dates, resources, quality of service, money and other financial indicators. In addition to providing measurements, targets at all levels should specify exactly how they will be measured.

In cases where the method of measurement is unclear, the goal should include it.

4 Keep an external perspective

It is crucial to maintain the perspective of an outsider when gathering good application requirements. Organizational activities should be focused on serving external stakeholders.

There are too many times when organizations engage in activities that have no benefit to external parties.

As the application requirements are being gathered, it is usually easy to discover these activities by asking, *"Why are we doing this?"*

The reason we do something in a certain way typically lies in the past. However, business processes have subsequently changed, and as a result, the activity has lost an external reason to exist. Therefore, this is an orphaned activity with no external purpose and should be discarded.

Interoperability and customer-centricity can also be maintained with an exterior view, leading to the realization of an organization's true purpose.

5 Developing iteratively

The most effective way to manage an application/interoperability project is to manage it iteratively. You should anticipate, encourage, and direct change.

Interoperability application development starts with the assumption that the interoperability requirement will change over time and that, iteratively, the interoperability application can be brought up to date.

This complete feedback loop ensures that all measurement best practices are implemented. An application's interoperability/business requirement can be measured both in an interoperability process and when it is automated in software.

Sometimes there will be times when the measure is not met. As a result, feedback to the next iteration allows for additional data to be analyzed again with more accurate information, allowing for a re-implementation.

6 Model-based modeling

Interoperability requirements can be analyzed, comprehended, organized, optimized and communicated visually with a graphical language.

Modeling is an abstraction process that involves abstraction at every stage.

The critical details of interoperability requirements can be identified using graphic models of interoperability requirements. The model also allows several competing arrangements of interoperability requirements to be analyzed, allowing better decisions to be made.

7 Interoperability and technology requirements management

Interoperability and technology requirements change and need to be managed. Both interoperability requirements and source code modifications are part of the change management process.

Organizing priorities should determine the importance of interoperability requirements. While some interoperability requirements are driven by laws and regulations, others may simply be directed by finances.

Understanding the impact of changes is crucial to managing interoperability requirements. Changes in these requirements should result in differences in interoperability processes as well as software that automates these processes.

Software and process modifications can have a significant impact on interoperability costs. In case of change, the adjustments need to be fully analyzed, incorporated into solutions and deployed in implementation.

The traceability of interoperability requirements is crucial to assessing the impact of that change.

They can alter an organization's goals, objectives, and vision or change software requirements, resulting in necessary alterations to the design and implementation of software. Trackability allows these changes to be assessed.
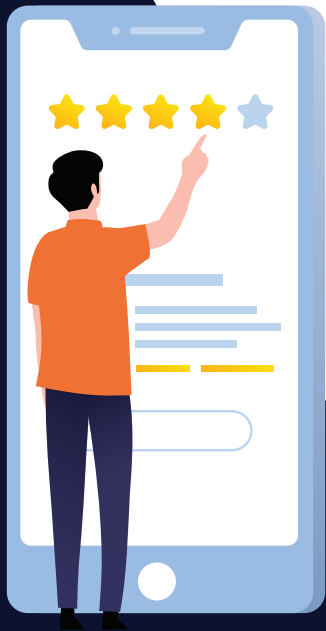
8 Assurance of quality

In gathering and implementing interoperability requirements, quality assurance should be included.

It is among the most costly defects possible to have in the development of systems if problems with interoperability requirements are left undiscovered.

Detecting and fixing an interoperability problem would include gathering software requirements based on a defective requirement for interoperability, analyzing it, designing and implementing the improved requirement, and testing the implementation.

A final thought

At Attribute, we apply such thinking to the broader spectrum of businesses. No matter the sector in which your business operates, our innovative AI software is designed to assist with all facets of customer and client integration.

Get in touch if you'd like to benefit from our plug-and-play software today and pave the way for better communication within your business and boost sales as a result.