

# friends

## Agile Integration

## Competency Center (ICC)

friends

# Friends agile integration competency center (ICC)

This white paper is created to help you manage your Integration Competency Center (ICC), a framework model for your integration management. It describes the benefits of ICC and how you can put its methods into use in your organization. Simplicity is the innovation!

Companies' IT systems play a central role in developing and implementing digital services. Nowadays, there are many new challenges in the area of development, operation, and maintenance. Managing integrations, APIs, and RPA is one of the most critical ones.

Companies employ a range of information systems of different ages, implemented in different ways. Managing the interconnections between this collection of IT systems and the environment they are meant to serve, has become more and more challenging. API management, API economy and hyperautomation with RPA bring even more complexity to the integration palette. By carefully planning and managing their integration architecture and its implementation, companies can save on costs and achieve other measurable benefits. The increasing need to combine and enrich data comprehensively across different systems or provide or consume different APIs makes integration management an increasingly important competence that companies must master.

HiQ's Agile Integration Competency Center is a framework model for integration management. It combines the best practices of software development, service and project management and digital business development. Despite its name, the modern ICC is more of a network of expertise and responsibility than a centralized center.

With Agile ICC approach companies of all sizes improve their agility as they systematically:

- Develop their expertise in integration work
- Manage and streamline their integration environments to meet business needs
- Direct the efficient development, maintenance and operation of integration solutions and API's
- Bring stakeholders together in seamless cooperation
- Choose the right tool (APIs, workflow integrations, hyperautomation) for each need

The Agile ICC framework enables companies to:

- Achieve cost savings in integration work and system administration
- Develop their digital business operations through efficient integration management
- Find new business opportunities from digitalization

The Agile ICC is presented to the organization through transformational leadership: by changing working and structures that are not working and engaging people through participation. The importance of cooperation and the development of competencies and responsibilities are emphasized throughout the Agile ICC onboarding. This leads to a deeper understanding of the integrations' role in digitalization thorough the organization.



## Become a forerunner

### The Agile Integration Competency

Center (ICC) leads to more systematic integration management, which in turn helps you further develop your competences and competitiveness. Many kinds of challenges tend to arise during the integration work. Fortunately, the most typical stumbling blocks are already well-known and can easily be avoided.







## Enhance your process and ways of working

Integration practices can be too sparse or incomplete, heavily personalized, siloed by the organizational structure, or information that does not reach all the stakeholders. For example, it is typical to assume that another project is taking care of integration implementation or testing when no one has been given the responsibility.

Agile ICC forges integration management processes and common ways of working that increase trust among the stakeholders. Agile ICC helps you identify which of your current frameworks are most effective. In Agile ICC the roles and responsibilities of everyone participating in the integration work are clarified. As a result, you get harmonized best practices for your company's integration environment and effective communication channels.

Agile ICC's commonly agreed methods and division of responsibilities speed up work and simplify decision-making. Less time is needed for integration implementation management and costs are reduced.

Agile ICC helps you identify the inoperative parts of your working methods, enabling you to streamline your processes and simultaneously achieve rapid results. This leads to an operating environment that functions on the service level required by the business operations (fit for purpose, fit for use). Efficiency is increased, bottlenecks are eliminated, and the sought-after benefits are achieved.

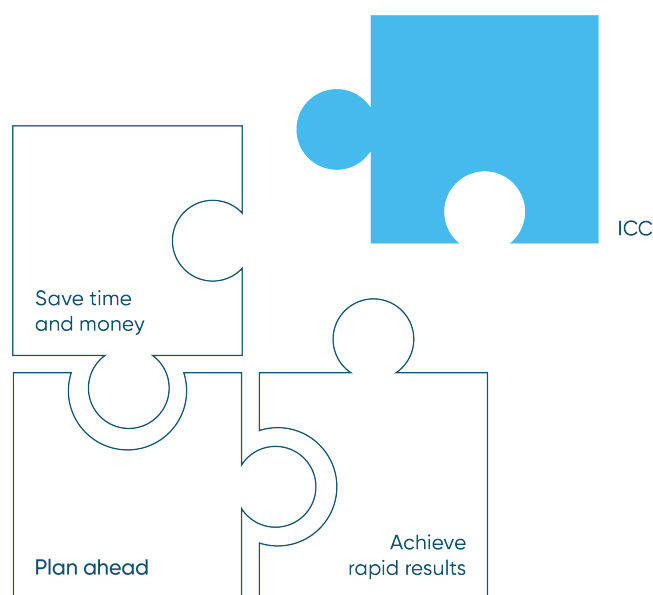


Figure 1 Agile ICC methods speed up work and simplify decision making

## Lead the integration

Agile ICC utilizes proven methods for implementing and managing integration work. It helps you identify critical responsibilities to the integration implementation. The aim is to systematically organize integration responsibilities and allocate tasks among individuals according to your organization's size and structure.

Every integration-related responsibility is defined according to the RACI model:

- Person(s) responsible for the implementation (responsible)
- A person who ensures that the implementation is performed (accountable)
- Person(s) participating in implementing the task (consulted) and
- Person(s) informed of the progress (informed)

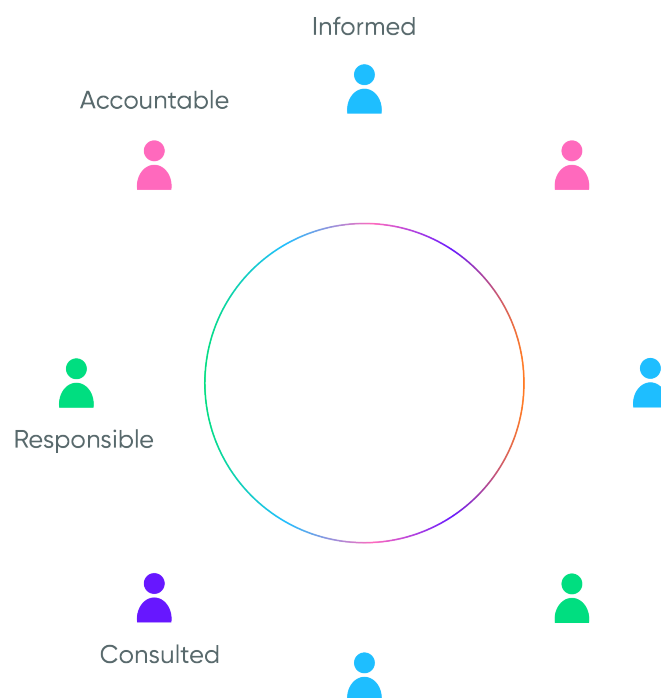


Figure 2 Information flows

Integrations typically involve several different responsibilities. These can vary depending on the size of the company, its operational models, business area and needs. Responsibilities may be distributed among several people, and/or one employee may be responsible for more than one task.

Examples of such responsibilities are provided below:

- Ownership of the ICC: Responsibility for the development of the integration implementation as an entity.
- Ownership of the business operations: ICC is not only an internal IT exercise, so it should receive the support of the business operations. The purpose of this is to gain executive support for prioritization and development work.
- Prioritization: Defining business operational priorities and managing project portfolios via interaction and dialogue with business operations. The task also includes the prioritization of ongoing work.
- Budgeting: The organizational model invests in the projects and other decision-making models. What does the funding and decision-making model enable, and what challenges does it pose?
- Define the metrics to be monitored (monitoring, reporting): Measurable functionalities selected for improvement. For example, the time from identifying a business operational need to the production of a corresponding integration implementation. Analysis of values can be the starting point for the necessary actions.
- Vendor management: Managing project-related vendors and cooperation.
- Integration backlog management: Maintaining a comprehensive view of current and future development targets.
- Integration specifications/business analysis: Making sure that all the integrations in the backlog are defined on an agreed level (definition of ready) and people making the definitions are getting all the needed help from all stakeholders like business and third parties.
- Resourcing: The right people, at the right time, doing the right things.
- Ownership of ICC tools: Ensuring the necessary integration tools.
- Work effort estimations: Transparency of workload, calendar time and costs for business operations.
- Integration architecture governance: integration architecture development, choice of preferred technology and ensuring sufficient quality.
- Availability and capacity planning: Defining and ensuring capacity

and managing availability. The solutions to be implemented must be technical sensible and achieved withing the agreed budget.

- Development guidelines: Creating processes and practices for development.
- Quality assurance: Deciding upon the testing procedures, following DoR and DoD.
- Stakeholders' management: Cooperation among internal and external stakeholders.
- Continuity management: Communication and integrations and responsibilities in possible critical interruptions in production. Planning procedures to ensure business continuity.
- Integration-related incident and problem management: Investing and solving integration-related incidents in production.
- Legislative responsibilities: Data protection, privacy, encryption requirements etc.

All the relevant responsibilities for your organization should be identified and assigned to people that are members of ICC. In that way, you will get the full benefit of Agile ICC framework and manage the integration development in the most agile manner.

Depending on the current maturity level, the organization might have a clear vision about the roles in ICC and how the responsibilities are distributed among them. If that should not be the case, Friends can provide an example casting of ICC that is proven to be beneficial in most cases. Usually, these roles are needed to handle the responsibilities in ICC:

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- Product owner(s) who are the organization's business area representatives in ICC. They are accountable for the integration development regarding their business area and bring the business needs to ICC.
- ICC Manager who has responsibilities in planning and leading daily ICC work. ICC Manager reports to the product owner(s).
- Integration Architect who is responsible for maintenance of the overall integration architecture and implementing the best practices.
- Functional Designer/Business Analyst who helps product owner(s) to create specifications to integration backlog.

In addition, a service manager who is responsible for the continuous development and project managers that are managing ongoing projects that include integrations usually take part in the organization's ICC

## Create a dialogue

Challenges in communications commonly arise as a company's size and its system environments grow. Information about integrations is not passed on to the required extent and in a timely manner, artefacts are missing when they are needed. In these gaps, work must be done on assumptions. It may even be that not all the participants in the interaction have been identified, both inside the company as well as among the external stakeholders.

In organization's ICC all the stakeholders who should communicate with each other should meet and discuss regularly. Agile ICC helps you identify the different parties of the integration work and ensure that the operational models provide the required and timely dialogue between everyone. Agile ICC is made up of best practices that ensure consistent processes and adequate dialogue. This way, you won't have to carry out integration work based on assumptions, but you'll find the most efficient ways to connect in conversations, share artefacts (integration cases, mapping, schemas, requirements, etc.) and achieve a rational schedule for the arisen tasks. When the stakeholders meet regularly and everyone knows the product owners of the business areas and different systems, the time spent in specification phase is also reduced: the relevant questions and needed artefacts can be asked directly from the responsible person, and the tasks are not left pending because of the missing information. And if some issues are pending, the reason for that is common knowledge, and needed effort can be made to tackle those hinders. As a result, the project and product owners are aware of the statuses and can further report them.



Figure 3 Agile ICC creates communication between stakeholders

## Include integrations as part of the overall strategy

Agile ICC clarifies the field of integration tasks, helps you identify development needs, and enables business services using existing data. Agile ICC creates an understanding of the data the company possesses and how it can be used to develop business.

Often, IT and especially integration platforms are seen as a cost rather than a competitive advantage. It is easy to get stuck in a rut of routine – as in work without any pre-planned directions. In this case, integration work does not necessarily implement the company's strategy in the best possible way.

The integration architecture makes cost-effective digitalization of business operations possible. Harmonizing old and new applications and systems to serve the business processes as a coherent entity requires exploiting technologies in the right places.

A well-planned integration architecture, with its system maps, is a great basis for managing the enterprise architecture. Using the TIME model, the IT systems are reviewed, and their life cycle stage is defined.

This helps assess applications based on their business operational value, costs, risk, and technical efficiency.

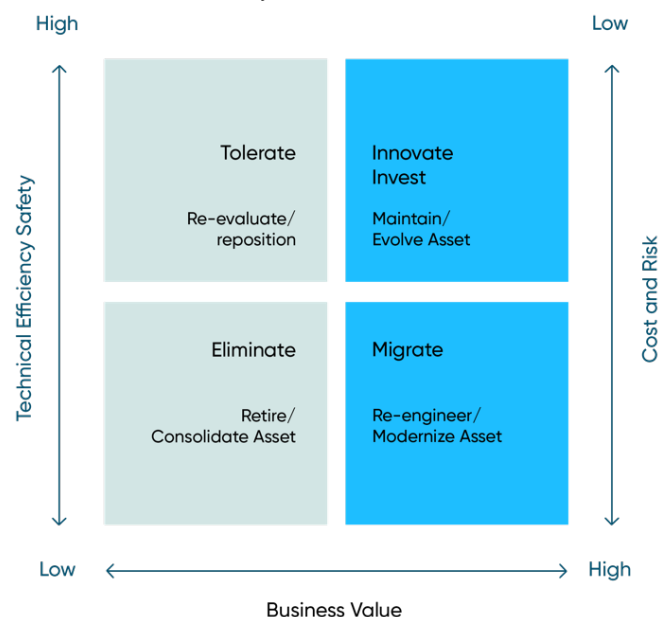


Figure 4 Gartner TIME model



### The TIME model teaches us to:

- Tolerate – keep applications that bring little value but have low costs and great efficiency.
- Innovate – invest in applications that have significant value for the business operations and are technically very efficient.
- Migrate – migrate to another application information that is valuable to the business operations but that is being processed in inefficient and expensive applications.
- Eliminate – eliminate inefficient or expensive applications with little value.

### The ICC-led integration solution:

- Brings the opportunity to extend the life span of Tolerate applications cost-effectively.
- Ensures excellent maintainability for Innovate applications.
- Facilitates and automates data transfers from Migrate applications.

## Keep up with the pace of changes

Agile ICC framework can ensure that the implementation method and technology of integration solutions are fit-for-purpose. The solutions can be trialed faster, leading to reliably functional end results.

At the heart of Agile ICC is an understanding of the dependencies of the integration environment. This understanding gives the organization the ability to select the correct accuracy to apply to tasks. Moreover, Agile ICC helps you to strike the right balance between experimental development and ensuring the availability of applications critical to business-critical implementations.

This will allow you to react to changes in the operational environment, predict the pain points in the integration management, and prevent problems from arising.

## Develop competence and operational methods

Agile ICC kicks off a comprehensive change of working methods. Dialogue between professionals lead to tight-knit teams that share responsibilities naturally. Collectively agreed frameworks enable result-oriented cooperation between business operations, operational IT and service development. Professionals can focus on their own area of expertise and develop their competencies. Employees can take the initiative, take charge of tasks and present ideas that could even be refined into new business. Silent information becomes visible and generates profitable activities.

Agile ICC helps to create a corporate culture supportive of continuous competence development. Change in operations always starts from individuals: the people implementing the actual integration tasks. That's why the benefits of digitalization only materialize through the refinement of individuals' competence. It is also important to develop the corporate culture, frameworks, and management practices to support change. Agile ICC helps to identify the integration-related abilities that can be refined to take the organization towards its objectives.

The ICC practices are agreed upon together with the organization's professionals. Jointly selected ways of working increase cross-organizational commitment. Therefore, Agile ICC framework will be more easily adopted and implemented into everyday work. This provides a basis for the company's technical development and innovation and can benefit the organization's digitalization. The organization evolves, creating new abilities and productivity – always keeping the people and corporate culture at the core of the development work.

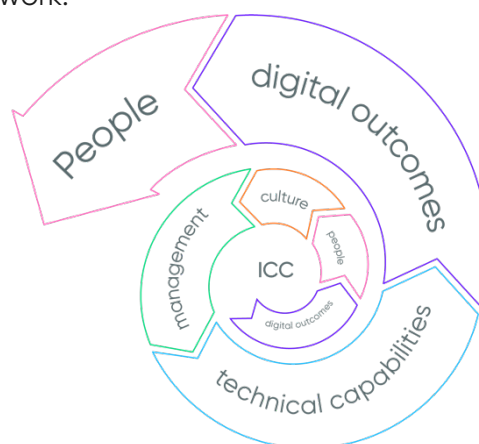


Figure 5 ICC provides basis for development both in technical innovations and organization's culture

## Build new business operations

The company's legacy systems contain a lot of information that may not necessarily have been utilized in the development of new business operations. By combining and enriching data from different systems, it may even be possible to create new services. ICC helps identify the untapped integration opportunities provided by legacy systems.

An information system in itself is not a competitive advantage. Only data refined into information is valuable and brings a competitive advantage to the entire company. ICC makes an organization's tacit competence openly available within the organization. The organization's own competence and ability to develop the integrations is continuously advancing. The organization's data capital, its competitiveness, and its ability to change grow and increase in adaptability in the constantly evolving market. At the same time, ICC develops and adapts together with the company's competencies.

**Agile ICC helps to identify the benefits and new business opportunities through, for example, the following ways:**

- More functional or completely new business operations. Integrations are part of a company's digital abilities, which can effectively leverage the company's abilities to develop its services, differentiate from the competition and even create new business. Friends ICC provides the tools to identify the best development targets and refine them into even better or entirely new businesses.
- More efficient utilization of data. The ICC helps create a detailed overview of the data contained in the company's systems, providing a basis for thinking about new ways of combining the data into knowledge. This is used both in the company's decision-making and to serve customers in better or in completely new ways.
- Facilitating adding new applications alongside legacy systems. ICC is used to evaluate and document integrations between all the systems. After documenting, the environment is systematically developed to improve its stability. New, for example, mobile-friendly systems can thereby be added to the legacy system ecosystem.

- Increasing the company's own competencies. ICC is based on the development of the operational culture related to the integration work and increasing the personnel's own competencies. Those competencies give rise to innovations and add agility to the company's operations in rapidly evolving, digitizing markets.
- Integrations as part of the company's strategy. Well-organized integrations enable new or more functional business operations. Guided by ICC, integrations are implemented in an agile manner and planned to support the company's objectives and overall strategy.
- Tool for the challenges presented by constant change. Fast changes are a daily occurrence, emphasizing the importance of leadership. ICC provides tools and frameworks that develop the organization's agility and competencies.

## Ensure the results

Agile ICC makes integration management measurable and transparent. It guides integration work, concretizes benefits from the integration, and highlights critical development targets.

Measuring is an iterative process that develops over time. In the initial stage, it is important to find the most significant indicators for the organization's current needs and to aim to automate the collection of indicator-derived data. After taking the key performance indicators (KPI) into use, it is important to assess the usability of the measurement data and the fulfillment of the measurement objectives. Naturally, that indicators will be added, removed, and refined as knowledge increases.

## Kick-off and implementation

Agile ICC implementation highlights cooperation and participation – not leading from above or outside. Each ICC implementation is different and customized to suit the organization's vision, strategy, current situation, and resources. Friends provides experts to help kick-off and implement Agile ICC in your organization.

## Understanding the current situation

The adoption of Agile ICC starts from understanding the current situation. Friends Agile ICC doesn't bind system development or integrations to a certain pre-defined framework, integration platform or system vendor supplier. On the contrary, it seeks the best practices for every organization according to their own operational cultures and helps to adapt new systematic ways of doing things in cases there are yet none.

### During the preliminary phase

- Investigate the existing integrations' situation and the other parties participating in the integration implementation.
- Get to know the existing integration implementations to the extent that is possible.
- Get to know the biggest pain points of the integration work.
- Discuss the corporate culture and leadership procedures. The corporate culture defines how ICC should be deployed in your organization

## Establishing the ICC

Setting up ICC usually needs workshopping based on the preliminary clarifications, some focus areas are attended. In the workshops these topics should be discussed:

- The best practices of ICC and integration work
- Development targets that are selected
- Challenges that Agile ICC will be used to solve
- Integration architecture that your ICC will follow in the integration development work

After the focus areas are agreed upon, it can be decided how Agile ICC is adopted in the organization: how are the different activities implemented, who implements them and what does this mean in practice? In addition, primary development targets are set. The responsibilities and related tasks are agreed.

The organization should internally discuss how the responsibilities will be divided. After that the steps for introducing ICC to the organization can be agreed. That includes agreeing on the weekly/ monthly/other meetings related to the integration work and the transferring of frameworks to other parties.

Also, the progress indicators should be selected and agreed on how they will be monitored. The application, testing procedures, transfer to production and continuous data transfers relating to the implementation – in short, the processes – are agreed upon. In addition, the development targets the resolution of which will lead to rapid improvements are defined.



In the nutshell the establishment phase ensures that:

Processes are identified and prioritized. Responsibilities are identified and assigned to roles and people. Indicators to measure ICC work are selected. People are coached to run the roles and responsibilities that come with them in ICC.



## Running ICC

After the establishment workshops, the organization has sufficient information and knowledge to implement the selected best practices and can start running the ICC. This means:

### Running weekly and monthly tasks via processes:

- Communicating
- Overseeing that the agreed integration architecture, processes, and best practices are followed
- Adjusting the workloads between developing new integrations and operating the existing ones according to the business needs
- Planning further integration development
- Adjusting the processes continuously

ICC should be a permanent part of the organization and it should scale with the business needs of the company. As an organization and operating environment evolve, further development of ICC is recommended to continue. HiQ supports ICC operations on biannual development days (1 day every six months) where the ICC operations are developed further.

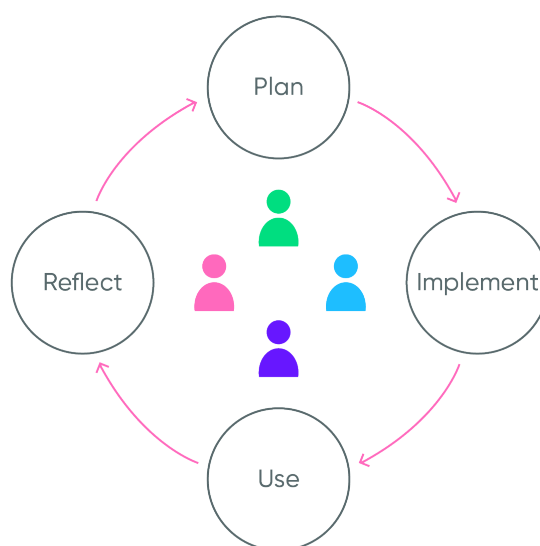


Figure 6 ICC is part of the organization and it is developed continuously



## Summary

Friends' Agile Integration Competency Center is a framework for integration management. It combines the best practices of software development, service and project management, and digital business development.

**The Agile ICC is a collection of best practices that organizations of all sizes can use to improve their agility systematically:**

- Develop their expertise in integration work
- Manage and streamline their integration environments to meet business needs
- Direct the efficient development, maintenance, and operation of integration solutions
- Bring stakeholders together in seamless cooperation

**With Agile ICC framework...**

- You can divide the responsibilities of the integration work and ensure enough dialogue between different parties.
- You can develop leadership procedures supporting the organization's own competencies and expertise.
- You can harmonize operating methods and build an agile operational culture that efficiently utilizes the opportunities of digitalization.
- You can achieve significant cost savings in integration work and system administration.
- You can develop the company's digital business operations through efficient integration management.
- You can enable possible new business opportunities utilizing digitalization.

If you require help in understanding your current situation, establishment or running an existing ICC, please contact:

Antti Toivanen, antti.toivanen@hiq.fi, +358 40 715 1935; Follow Antti on Twitter | LinkedIn.

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## About Frends

Frends iPaaS is the Integration platform as a Service.

Frends was developed as a productized solution in 1988 for the following Finnish Oil Refinery companies: Neste, Shell and Teboil, which are still Frends customers after 30 years.

Today, we offer hyperautomation by combining a Process Automation capable integration platform Frends with UiPath Robotic Process Automation skills and some intelligent decision-making using Machine Learning from Azure.

With Frends, you can develop, manage and secure all APIs integrations and process automation within one powerful platform. Lean, low-code, and intuitive. Frends is the choice for Digital Integration Hub and Hyperautomation.

**Learn more**

