Implementation Guide for Ingeniux CMS

INGENIUX

Content beyond boundaries

Contents

Implementing a content management system is never a simple undertaking, but it doesn't have to be complex and frustrating either. The Ingeniux team has developed a straightforward method to engaging with customers as they kick off a new web content management implementation or update an existing one using the Ingeniux CMS platform.

What Ingeniux Brings to the Table

Every organization approaches a web content management implementation project differently. Some do the entire project in-house while others bring in external resources and agencies to help with different aspects of the project from requirements definition to design to development and implementation.

Ingeniux has extensive experience working with integration partners and design agencies on CMS implementation projects and can support the customer's preferred project approach. The Ingeniux team brings important value-add to the project at each stage, and it's important to set the proper expectations on all sides before any CMS implementation project is kicked off.

The Team

Setting expectations often start with defining the team needed for the implementation project and outlining each team members' roles and responsibilities. Keep in mind that every organization is different in terms of their departmental and functional teams, so these are very general recommendations.

Also, depending on the customer, the Ingeniux CMS implementation project can be led by the customer, Ingeniux, or an Integration Partner. Depending on who is leading the project, resource percentage requirements will differ greatly.

At a high-level, here are the typical roles for the client and the Ingeniux team. Again, keep in mind the role the customer plays in the implementation project. In some cases, the customer's IT group plays a primary role in design and development; in others, it plays a supporting role, which affects resource estimates. The same applies to designers, whether they are internal or sourced from a design agency.

Client Roles	Responsibilities
Executive Sponsor	The Executive sponsor has the authority to approve work at each milestone for the project, including the information architecture and web strategy, graphic design, technical specification, site development delivery, and launch. Sometimes this is one person, and sometimes the organization allocates approvals for each phase to different team members. The key is that there is a designated person who can make the final approval and signoff in a timely manner at each phase of the project.

Client Roles	Responsibilities
Project Manager	The key resource from our perspective is a Project Manager who can provide timely feedback, help steer the project, and orchestrate the right internal resources and approvals from leadership and subject matter experts. This person participates in regular meetings, receives status reports, and facilitates internal resources and approvals. The client project manager can manage duties outside of the web project. Most of our customers have a project manager that is 25% to 50% allocated to the website project. Or in other words, has the flexibility to be available 10 to 20 hours per week depending on the phase of the project.
Senior Marketing Leader	Ingeniux needs input from marketing on graphic design and branding requirements, as well functional requirements for the website. Ingeniux calls on this resource as needed and facilitates communication via the project manager. This person can also be an internal project sponsor.
Senior IT Manager/IT Lead	We work with IT on the technical requirements, integration requirements and access, and provisioning of the servers and network infrastructure (if hosting on premise). We work with this resource as needed and facilitate communication via the project manager. This person can also be an internal project sponsor.
Department/Functional Team Members	We often meet with departmental managers to define high level business requirements for the project. These meetings would occur during the needs assessment and specification process.
Web Manager/Web Team	Web managers and staff participate in the onsite training program, and in project meetings as needed.
Developers	Developers work on building web pages, components and other aspects of the Ingeniux CMS platform – if the customer is involved in the development stage.

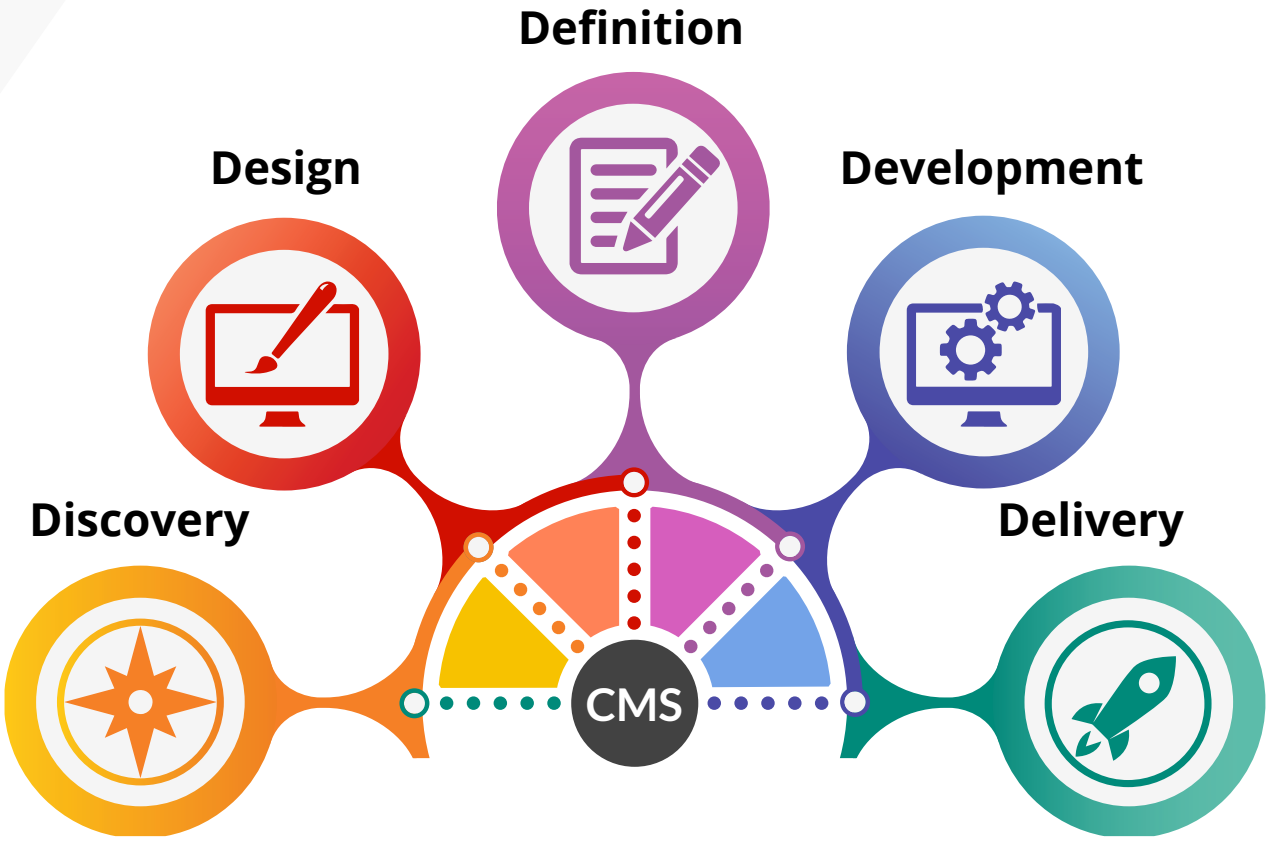
Client Roles	Responsibilities
Designers	Designers take the design requirements and create design mockups. Once the mockups are approved, designers create the markup layer based on the technical platform defined.

Ingeniux Team Role	Responsibilities
Project Manager	The Ingeniux Project Manager manages the entire implementation project from definition through to testing and implementation.
Business Analyst	The Business Analysts works with the project team to help define business and functional requirements for the new system. The analyst leads requirements gathering process and is responsible for defining the discover and specification documentation for the project.
IT Architect	The IT Architect helps with the functional and business requirements and the creation of the technical specification.
Developer(s)	Ingeniux developers are involved in all or portions of development as defined by the project schedule.
Systems Integration Specialist	Systems Integration Specialists work with customers to define and bring together disparate sub-systems into one system and ensure they act as a coordinated whole.
Network Operations Engineer	Hosted customers may work with Ingeniux Net-Ops. Network Operations Engineers monitor internal systems and equipment to ensure everything is running as it should. They are responsible for the care of the network, servers, and network connected equipment.

Other Important Considerations

- Things the client needs to be aware of and consider in their planning
- The importance of communication throughout the project

The Ingeniux Approach to Implementation – Introducing the 5 D's



With years of experience implementing the Ingeniux CMS, Ingeniux has it nailed down to a standard structure and process. We call this the 5 D's of Implementation and to help you understand the process; we'll map it to the process of building a house. Here they are, in short order:

1. Discovery:
Discovery starts with a high level understanding of what you want. What are the basic requirements? When you decide to build a house, what's the first thing you do? Talk about what you want the house to look like – one-story or two, four bedrooms, 2.5 baths, a finished basement, etc. Essentially, you are describing what you want your website to look like. For example, you want

a home page that provides a what's new section, a list of current blog posts, lots of images of your product, a separate web page for each product you sell, a resources section that provides whitepapers, blog posts, and other content you develop for your products and industry. Here you also talk about color, point out other sites you like, sites you don't like, and so on.

2. Design:

With the initial requirements identified, a set of rough designs are built giving you a visual perspective of what you have asked for. This is similar to a set of sketches by the architect who is designing your house. At this point, you have a pretty good idea of what your website should look like and how the Information Architecture looks from a visual perspective.

3. Definition:

The definition phase gets into the meat of how you will implement the Ingeniux CMS to support your requirements. At this point an in-depth business and functional requirements phase takes place. It's during Definition that you discuss content, systems users, integrations and other requirements that affect how the CMS is set up and what development needs to occur. In our analogy of building a house, this is where the blueprint is created – showing exactly how the house is laid out, where the wiring and plumbing needs go, the windows, doors and so on. This phase is completed when the Technical Specification is written and approved by the customer.

4. Development:

With the technical specification approved, development kicks off – building the actual house.

5. Delivery:

A range of things happen during the deployment stage. The development team implements the CMS in the appropriate environment; CMS training is conducted, content is migrated into the system, and the website goes live. Equate this to moving in to your new house, setting up and arranging the furniture, and being shown how to use the new shower, lights, and other cool things you asked for.

It's not unusual for a customer to have questions, find bugs or realize they needed additional capabilities not initially asked for during the deployment phase. Ingeniux plans for this "implementation period" through the management of what's called a "Punch List." We'll describe the Punch List in detail in a later section. For now, know that it's never a simple drop the CMS in and away for Ingeniux. We are committed to ensuring you have everything you need to get up and running as quickly as possible, the way your team needs to work.

The 5 D's – In Detail

Discovery & Design

The Discovery Stage focuses on documenting all the requirements that inform the design. During this stage, the client lists the high level requirements for the website, including how to organize and structure the content on the website, and what the website will look like.

Ingeniux is involved in the Discovery and Design Phase in one of two ways:

- The Ingeniux team leads the discovery and design phase.
- The client or a Design Agency leads the discovery and design phase and provides the resulting design and IA to the Ingeniux team for use in the Definition Stage.

How do you know which approach is the best for you? It depends on where you are in the process. If you are at the very beginning and need support defining your brand and web strategy, then you should work with a design agency. If you already have a website implemented and need to refresh your website or update your CMS capabilities, then Ingeniux can lead the discovery stage.

Working with a Design Agency

If you don't already have a clear understanding of your web, brand, and marketing strategy, Ingeniux recommends you work with a Design Agency to help you during the Discovery and Design Stage. A Design Agency is skilled in experience design and creative strategy and can help you develop creative and effective brand and marketing strategies.

When you work with a design agency, Ingeniux has a limited role in the discovery stage. In this situation, our role is to understand the IA and capture any technical requirements that impact the design.

Ingeniux Leads the Discovery and Design Stage

If the client knows their website strategy and they have a firm understanding of what they want, then Ingeniux can often compress the discovery stage with the Definition Stage. At this point, you understand at a high level what you want and everything is done in the context of the design stage.

Who's involved?

The client determines who it needs to be involved in the Discovery and Design stage, but typically the Executive Sponsor, Project Manager, Senior Marketing Manager, along with marketing team are involved in this stage.

Design is Only One Part

Our clients know that what they do with their website impacts their brand. But it's important to remember that the website isn't only about good design. The best design agencies know that design starts with content structure and information architecture. The visual appearance comes later.

The problem with doing the visual design first is the often the content, or the user experience doesn't fit the pretty picture. The first thing the client needs to think about is how to organize their content; then they can look at the visual design.

Definition

The Definition Stage is where the Ingeniux team takes all the requirements, business, functional and technical and designs the CMS implementation. The primary deliverable from the Definition Stage is the technical blueprint.

In addition to the high level requirements, IA and visual design defined in the Discovery and Design Stage, business and functional requirements need to be captured. A Needs Assessment workshop conducted by the Ingeniux team helps capture business and functional requirements. This workshop typically happens at the client site over a two day period.

During the workshop, we spend time identifying the defining how you want to manage content in the CMS. There are three questions that we ask at this point:

1. Where is the content coming from?

Is the content fed from another system or is it manually created?

2. How will it be managed in the CMS?

Who owns the content? What is their skill level? Are they a frequent user/contributor? Do they have domain experience? There are two ways to manage content in the CMS. First, a program is developed to place content automatically on the web page. This could be based on taxonomy or a navigation element. Second, content is placed via an editor decision process where the editor selects and defines where to published the content.

3. Where is it published?

Is the content published on a web page? In a component? In a theme? Is it published to one website or multiple sites? Does the content need to be responsive? Adaptive? In addition to the business and functional requirements defined during this content definition process, any technical requirements are also captured. Technical requirements may include the integration of third party datasets, integration with authentication systems, performance requirements and so on.

Once the team captures this information, the Ingeniux team starts to create the technical specification that defines the scope of work to complete.

The technical specification outlines in detail:

The content re-use strategy

The content re-use strategy provides the biggest return on investment a CMS can provide. It's challenging to think and talk about, but it needs to be embedded into the design. Some key aspects include:

- What are the global site conventions, such as header, navigation, footers? What are the business rules defined in every page or certain sections?
- What is the content hierarchy? How is the content organized? This is the foundation of the re-use model, and it's used to program things such as the index, featured lists, and other lists.
- How is the taxonomy structured? The taxonomy strategy must be defined in advance, preferably at the Discovery Stage at least a high level, then laid out in detail in the Definition Stage. The challenge with defining the taxonomy is that many clients don't always know how they will categorize content until they start to use the CMS. Let's go back to our building a house analogy. It's like getting one bathroom and realizing that you need two to support the entire family. It's critical to understand how you will structure your content upfront to make it re-usable across your website and other channels in production. Note: Ingeniux can help arrange Taxonomy Workshops using a partner service if the client requests.

The search strategy

In many instances, search is used as a primary way to navigation a website. It's important to understand your search strategy because it is not inherent or intuitive. Things you want to define upfront:

- What are the key terms? - You want to structure results around terms you know your customers/audience uses
- How is the metadata applied and used?
- How is content categorized? This categorization supports faceted search.
- The important thing to remember is that your search strategy needs to be clearly defined. Don't' assume it's automatically part of the implementation – plan it thoughtfully.

The Data Model

Based on our understanding of the content, re-use strategy, search strategy and IA, we outline a structured data model:

- How to model the data
- How to manage the data
- How to deploy the data

Graphical Design Process

The technical specification needs to describe howto implement the graphical design defined in the Design Stage.

A good design will address several things:

- **Responsive design** – Responsive design describes how the website will adjust to different screen sizes. Responsive is a foundational aspect of design and is a tool, not a strategy for delivering mobile content.
- **Mobile experiences** – responsive is one way to support different screen sizes, but it's important to understand your mobile content strategy from a wider perspective. It's a form factor experience (called adaptive design) that takes into consideration things such as time of day, type of account and experience delivered. In an adaptive design strategy, all the instructions are not provided in the markup layer. You define what content to deliver to what device and feed that from the server.
- **Performance Testing** – Performance testing is done for the size of the design. You need to know how long it will take to render pages based on the design. Delivery on smaller mobile bandwidths also needs to be considered in mobile performance testing.

At this point a set of functional wireframes for the templates are created. The wireframes define how pages layout for desktop, mobile, and tablet views.

Explaining with Visuals

The technical specification lays out a great deal of information, some of it difficult for clients to understand. It is critical

the specification is understood however as technical and business leadership are required to review and approve the specification before the start of development.

To help ease the review and approval process, Ingeniux applies a visual explanation process. We create what we call "box outs," visual diagrams of how the content is created, managed and published, including the mobile experience. By focusing the discussion around visuals, clients can understand the technical design better and can approve the specification more quickly.

Anticipate participation in meetings and approvals over a 2-3 week timeframe to complete this review and approval process.

Development

There are three primary pieces of development that take place:

Markup Layer

The design agency controls the web development and implementation of the design in most projects, but they do not own the technical platform.

Designers create the CSS/JavaScript markup. Not only is the markup validated against the original design, but it must be tested and validated against the browsers and browser versions that have been identified by the client. Creating the markup layer is as much a science as it is an art.

Customers have different levels of tolerance around "pixel perfection." In most cases, markup easily matches 95-98% of the design, but it's the last 2% that can create a great deal of work for the developers. It's important to know what your level of tolerance is.

Also, the team must conduct performance and scaling tests on the markup layer to confirm it performs as defined in the technical specification.

Site Implementation on the platform

With the markup complete, it's time to implement it on the Ingeniux platform and build the rest of the CMS application. Site implementation is a solid process based on best practices and experience of the Ingeniux team.

Our team understanding the best, fastest, most efficient and cost effective approach to implementation the Ingeniux CMS. Based on the technical specification and design, we can usually estimate to within one day how long it will take to implementation the definition.

Integration of 3rd Party Datasets

If your definition includes the integration of third party datasets, then expect the implementation time to increase. These types of integration always make Discovery and Definition more complex which is why it needs to be identified and addressed from the beginning.

Ingeniux has a framework and the connective tissue to many widely used applications such as Salesforce and SharePoint, and we are constantly building connectors to other popular applications (e.g., Freshdesk, Zendesk), event management apps, learning apps and more.

We also do custom implementations for customers who have specific requirements for how content is integrated and displayed and for how the customer wants to interact with it when it's in the CMS. Custom integrations can be a simple as an RSS feed or as complex as a SAP integration where authentication is required.

We have seen the cost of a CMS implementation increase four-fold to accommodate integration with third party applications.

User Authentication Considerations

More and more often we are addressing integrations that require user authentication to support a client's need to provide a secure experience or to personalize the user's experience based on implicit (geo-location, clickstream, etc.) or explicit information (account information).

Search

Ingeniux provides a search engine that works for both the public facing website as well as the backend CMS administration. Called InSite Search, it is built into the Ingeniux platform.

However, you may want to integrate a third-party search engine such as Google Search or other to support your public facing website.

Final Steps in the Development Stage

The final steps in the development stage focus on the ensuring the implementation matches the specification. This is our internal QA pass, and we tweak and adjust as necessary during this final check.

Once we have completed the internal QA, the CMS is deployed to the Staging Environment.

Delivery

Delivery focuses on training the client on the new system and supporting its delivery to the production environment.

Training

Depending on the specifics of your implementation or project, training may be a simple 1-2 hour walk-through for existing customers and small site enhancements or it may be a multi-day, intensive training involving key users of the CMS.

We'll work with you to establish a training program that's right for your team.

Ingeniux provides the client a Runbook – essentially an operating manual to use the CMS. The Runbook is a subset of the technical specification. Help files and applications are also made available for the CMS that help editors and contributors manage content.

New implementation training programs will depend on a number of factors, including how the site was implemented (by Ingeniux or someone else). That said, training on a new implementation will typically include the following:

- Fundamentals: Get to know the CMS and learn how to perform essential tasks.
- Site Training: Become familiar with your new implementation and learn how to work in the CMS according to the specification document created in the definition process.
- Site Configuration: Configure the working environment for end users. Includes lessons on how to set up and manage workflows, page creation rules, publishing targets, user permissions, security, and more.

Using the CMS

With training complete, you can now use the CMS. Training is often the most interesting part of the implementation as the client takes the controls and really starts to see how the system works.

Dealing with the Inevitable

There will be issues. To assume everything will run perfectly and everyone will be happy is a mistake and leads to frustration that doesn't need to happen. It's critical that you schedule dedicated resources for content entry to identify problems as early

in the process as possible and get them fixed.

You will find bugs. In our experience 10-20% of the issues you come across when starting to use the CMS are bugs. And we will fix them.

What about the other 80% of the issues? When you start to use the CMS it's common to realize that:

a. The design doesn't account for how you actually use your content

b. You realize you need something you didn't think of before

It's not uncommon for a client to start to use the system and find places that don't work the way they expected or need. It's not due to a bad design or an incorrect specification, or even the client leaving out a critical piece of information.

When you get your hands on the final version, and you can touch it and see how it works, you may start to realize that it's not exactly what you needed. This happens. Often.

That's why we have the Punch List. The Punch List is a list of fixes, adjustments and change orders that arise from you using the actual system. It's a contingency plan, and every client we've worked with has needed it.

This list typically is addressed over a 2-3 week period, but it's never completely finished until the client has migrated its content into the new system.

The Punch List is a software application that tracks issues that come up during deployment. Every request is triaged and determined as In Scope or Out of Scope. In Scope issues are addressed as part of the Punch List and include not only bug fixes but smaller changes or adjustments identified as necessary to use the system properly. Out of scope items are aggregated and a Change Request Work Order is completed.

Ingeniux is committed to ensuring you get the CMS implementation you need. We know that changes will be reguired – some anticipated, others not. A contingency plan is better than stopping the process and discussing change request after change request, going through approval and then eventually moving forward.

The Ingeniux Commitment

Ingeniux is committed to helping our customers be successful now, and in the future. We will work with you to create an effective site, keep the site up and running 24/7 365, and continue to innovate and evolve the site to advance the goals of the organization.

INGENIUX

PO Box 21466
Seattle, WA 98111

info@ingeniux.com
877 445 8228