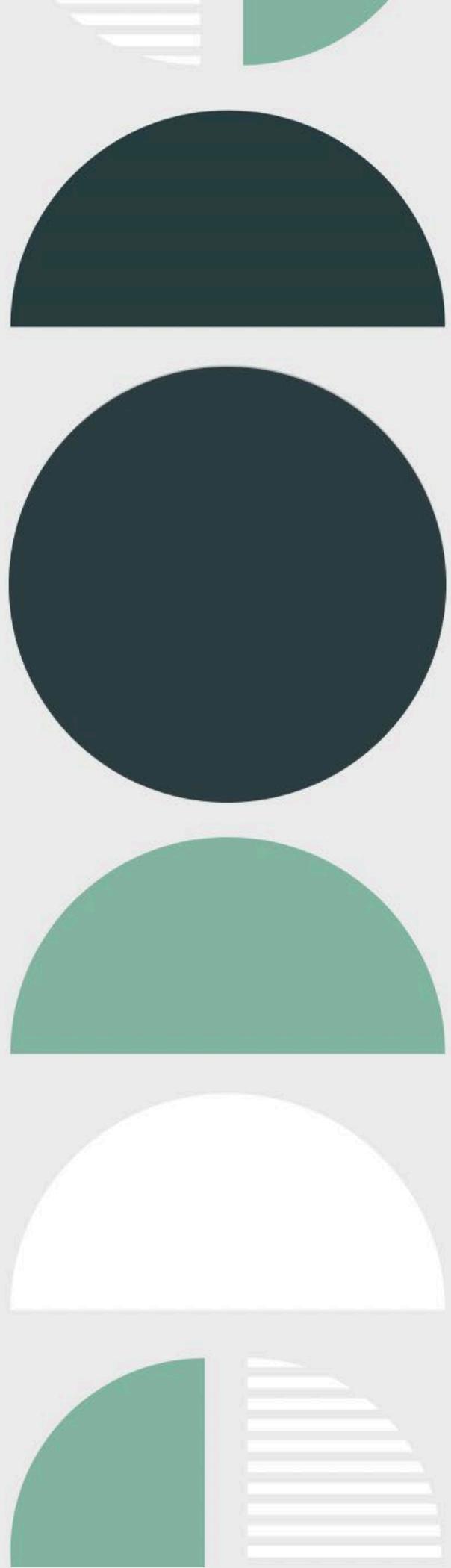


# Predictive Intelligence readiness

Developed by the ServiceNow Best Practice  
Center of Excellence

August 2020



## What is Predictive Intelligence?

In service-focused departments including IT, HR, and customer service, agents spend a large percentage of their time performing mundane, low-value work like categorizing or prioritizing requests, searching for similar incidents and cases, and finding the right team to handle the work. These manual steps introduce human error and slower resolution time which can lower customer satisfaction and decrease efficiency.

Using a patented machine learning engine, ServiceNow® Predictive Intelligence helps your teams work faster by recommending content to agents based on connections between incidents, cases, alerts, and knowledge articles. Predictive Intelligence also accurately categorizes, assigns, and prioritizes incoming requests, freeing your teams to focus on the problem-solving that humans do best. These capabilities make adopting machine learning simple and accessible for businesses looking to reduce manual intervention, improve customer satisfaction, and elevate employee productivity.

## What are the Predictive Intelligence frameworks discussed in this workbook?

### Classification



Provides tactical relief for frontline workers by auto-populating fields that are critical

### Similarity



Helps frontline workers resolve incidents faster by linking them to similar tickets or relevant knowledge articles

### Clustering



Helps frontline workers plug knowledge gaps more efficiently and alert service owners to major incidents as they develop



## Why should I use Predictive Intelligence?

- Reduce the number of interactions required to resolve tasks
- Reduce the error rates of categorizing and assigning work
- Provide a better user experience with reduced reassignment and faster MTR
- Support better customer and agent experiences
- Improve knowledge base content

## What will this workbook help me do?

When you complete the steps in this workbook, you'll have an understanding of:

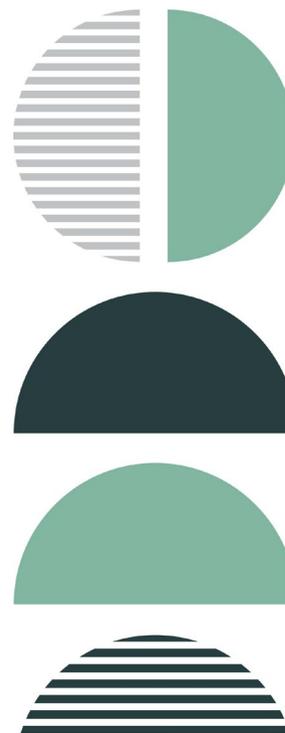
- The prerequisites required to get started with each of the three frameworks
- The common capabilities of each framework, to help you choose which to start with. The most common approach is to start with classification solutions and expand to clustering and similarity, but you can start with any framework.
- Resources and training to make sure you are ready to implement and maintain a Predictive Intelligence solution
- The steps required to configure Predictive Intelligence in your environment

## How to use this Success Workbook

This Success Workbook will guide you through the steps to get started with ServiceNow Predictive Intelligence so you can be certain that the way you're using ServiceNow achieves your business objectives.

Start by reading through the [Workbook Checklist](#) and review the steps and tasks to get started with ServiceNow governance. From the checklist page, you can either proceed through the workbook page by page or navigate only to the sections that you need using the hyperlinks.

Hyperlinks are included throughout the workbook so you can navigate back and forth between the checklist page and different sections.



## Workbook Checklist:

### Predictive Intelligence readiness

#### Step 1: Prerequisites

- [Business outcomes enabled by Predictive Intelligence](#)
- [Now Learning course: Predictive Intelligence Fundamentals](#)
- [Predictive Intelligence resources](#)
- [Predictive Intelligence licensing](#)
- [Data readiness](#)
- [Model tuning and precision foundations for classification solutions](#)
- [Machine Learning/Predictive Intelligence Administrator role](#)
- [Access to a non-production instance that is a recent clone of production](#)

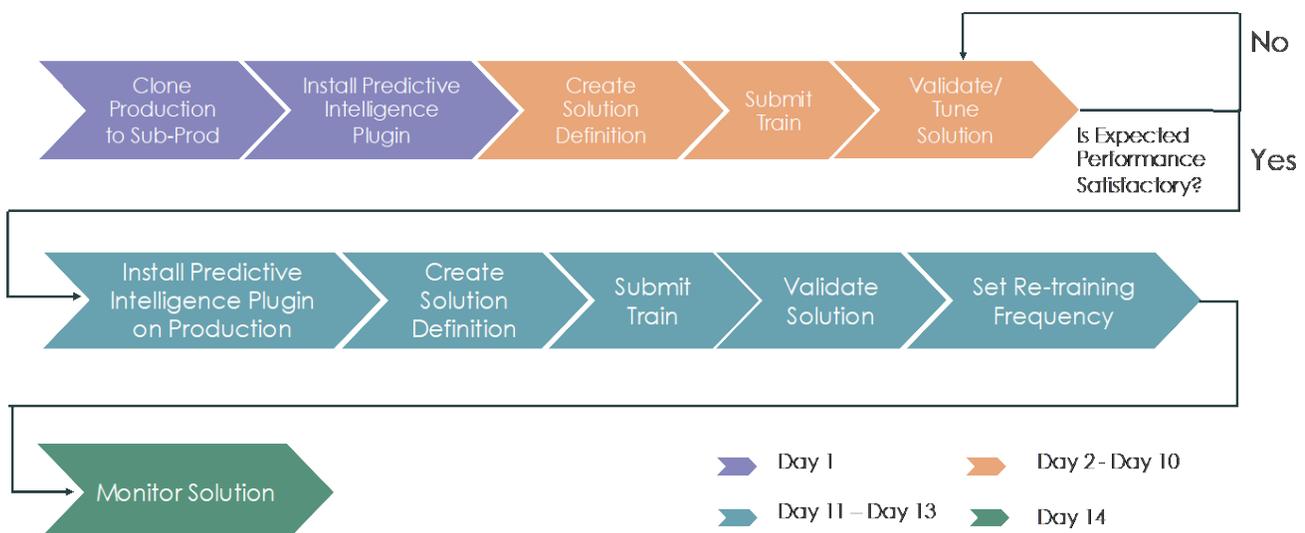
#### Step 2: Complete a configuration demonstration lab

The K20 Lab 2995 (link below) includes guidance for configuring classification, similarity, or clustering framework solutions and Agent Workspace. Follow the entire lab if Agent Workspace is in scope for you. To get started with classification, similarity, or clustering only, sections 1.1.3 - 1.1.5 are all you need.

- Sign up for this lab in Now Learning: [K20 Lab 2995](#).
- Open the post-registration email from Now Learning to start your three-day access to a temporary practice instance. You can also use your own sub-production instance, however the temporary instance has the benefit of pre-loaded practice data.

#### Step 3: Try in your environment

- Choose which framework you want to start with and [follow the process below to use Predictive Intelligence in your environment](#). Classification is the most common framework to start with but you can start with any framework.



## Step 1: Prerequisites

By completing these prerequisites, your configuration efforts will be easier, more efficient, and aligned with the value you want to realize.

### 1. Identify the business outcomes that Predictive Intelligence enables.

Prior to configuration, identify the business outcomes you want to achieve. The most common outcomes for Predictive Intelligence are:

- **Optimized resources, reduced costs** – Instantly deliver requests to the right agent with the right prioritization so they can address issues at the speed of business.
- **Increased fulfiller/requester productivity** – Empower employees and customers with more time and energy to focus on more complex tasks and requests, while routine and mundane tasks are automatically handled.
- **Improved overall business efficiency and customer satisfaction** – Provide consistent and reliable information. Exceed service levels and increase customer satisfaction with suggested content that helps resolve issues.

Here are examples of how Predictive Intelligence is used for ITSM, CSM, and/or HR:

	ITSM	CSM	HR
<b>Classification</b>	<ul style="list-style-type: none"> <li>• Incident categorization</li> <li>• Incident assignment</li> <li>• Predicts change risk</li> </ul>	<ul style="list-style-type: none"> <li>• Case categorization</li> <li>• Case assignment</li> <li>• Case prioritization</li> </ul>	<ul style="list-style-type: none"> <li>• HR case categorization</li> <li>• Assignment group prediction</li> </ul>
<b>Similarity</b>	<ul style="list-style-type: none"> <li>• Major incident detection</li> <li>• Recommends similar resolved incidents</li> <li>• Recommends similar open incidents, problems, and change requests</li> <li>• Recommends relevant knowledge base (KB) articles for an incident</li> <li>• Suggests articles related to currently viewed article for a requestor</li> <li>• Alerts author of identical (or similar) articles to prevent duplicates</li> <li>• Identifies similar standard change template opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• Major issue detection</li> <li>• Recommends similar resolved cases</li> <li>• Recommends similar open cases</li> <li>• Recommends relevant KB articles for a case</li> <li>• Suggests articles related to the article a requestor is currently viewing</li> <li>• Alerts author of identical (or similar) articles to prevent duplicates</li> <li>• Email auto-response</li> </ul>	<ul style="list-style-type: none"> <li>• Suggests articles related to the article a requestor is currently viewing</li> <li>• Alerts author of identical (or similar) articles to prevent duplicates</li> </ul>
<b>Clustering</b>	<ul style="list-style-type: none"> <li>• <u>Knowledge gap analysis</u></li> <li>• Identifies incident clusters</li> <li>• Identifies similar cases and similar KB articles</li> </ul>	<ul style="list-style-type: none"> <li>• Knowledge gap analysis</li> <li>• Auto-groups cases to identify major cases</li> </ul>	<ul style="list-style-type: none"> <li>• Knowledge gap analysis</li> </ul>

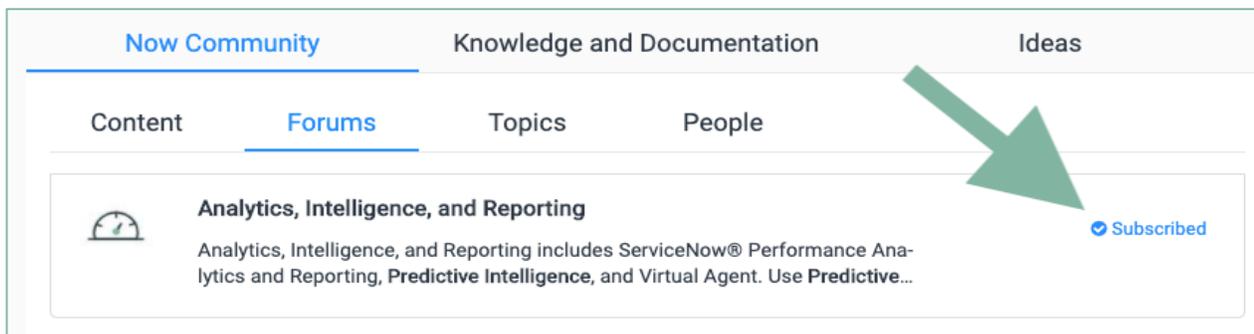
## 2. Take the Now Learning course on Predictive Intelligence Fundamentals.

This course is important to gain foundational knowledge of Predictive Intelligence and to review guidance for configuration.

## 3. Review the Predictive Intelligence resources.

Take the time to visit each site and keep these resources ready when you're planning and executing your implementation. For the fastest time to value, consider engaging a ServiceNow certified partner or ServiceNow Expert Services.

- **Predictive Intelligence on the ServiceNow website** – The most up-to-date features and functionality offered by Predictive Intelligence.
- **Customer Success Center** – New materials are often added to the Customer Success Center. Visit and search for “Predictive Intelligence.”
- **Community** – New materials are often added to the Community. Visit and search “Predictive Intelligence” to review the content, forums, topics, and people resources curated for Predictive Intelligence. Subscribe to Forums or articles to get email updates when new content or comments are added.



- **Product Docs** – Search for “Predictive Intelligence” and the latest release for technical product information, including plugins and configuration guidance.
- **Now Learning courses** – In a previous step, you completed the Predictive Intelligence Fundamentals course. Search for “Predictive Intelligence” to sign up for additional courses to increase your expertise.

## 4. Have the right Predictive Intelligence licensing.

Get access to Predictive Intelligence capabilities with the following licensing packages:

- ITSM Professional
- CSM Professional
- HRSD Professional/Enterprise
- Now Platform App Engine Professional/Enterprise
- Software Asset Management (SAM)



Performance Analytics is not required but is highly recommended. See how Performance Analytics can help you to understand your data and opportunities for automation.

[Return to workbook checklist](#)

## 5. Data readiness

You will need 30,000+ qualified closed/inactive records of the same type consistently populated to use Predictive Intelligence, such as all records with a “resolved” status **and** a consistent number of field types and values.

In this example, the resolved status alone is not a usable data set if there were inconsistent field types and values. To illustrate, if within the 30,000 record data set, 15,000 records have three field values and the other 15,000 records have six field values, the system will recognize two 15,000 data sets and not a single 30,000 data set. This can happen due to someone changing the number of field values from three to six—or from three to any other number—sometime after go-live, and in this example, after 15,000 records have compiled.



The type of data needed depends on the outcome you're targeting. For example, if you want to automate case assignment for customer service, you'll need resolved case data, whereas a targeted outcome of automating incident assignment requires resolved incident data.

## 6. Model the tuning and precision foundations for classification solutions.

Use this [Customer Success Insight](#) to guide modeling your tuning for classification solutions.

## 7. Machine learning (ML) or Predictive Intelligence administrator role

The Predictive Intelligence administrator (also called a machine learning administrator) with rights to the admin roles ml\_admin and ml\_report\_user has three key responsibilities:

- Creating and training solutions using historic data
- Managing trained solutions
- Reporting

This person is usually an existing ServiceNow administrator who's trained and experienced with Predictive Intelligence solutions, however some customers choose to hire a ServiceNow certified partner or new employee with this skill set.

Fulfilling this role requires a strong understanding of the processes and data relevant to the use of Predictive Intelligence. We recommend this administrator also have these skills:

Consulting:

- Business process analysis skills to understand the user processes and determine where there are opportunities for machine learning
- Data analysis to identify appropriate data sets for training machine learning solutions
- Determining if and how machine learning is used elsewhere in the company
- Understanding the importance of coverage vs confidence as it relates to specific class values

Technical:

- Trained and experienced in Now Platform administration
- Table structures and basic filtering
- Data cleansing approaches, such as distribution analysis and background scripts
- JavaScript may be required to modify the business rules that apply the machine learning solutions
- REST API Explorer usage to test the machine learning solutions without generating test records

[Return to workbook checklist](#)

**8. Gain access to a non-production instance that is a recent clone of production.**

Configuration in Step 3 starts in a sub-production environment. If Predictive Intelligence (plugin: com.glide.platform\_ml) is not active on your sub-production instance you can request activation using the [HI Portal](#).

## Step 2: Complete a configuration demonstration lab

Practice configuring Predictive Intelligence by following a demonstration lab using a practice instance provided by Now Learning.

### 1. Sign up for this lab in Now Learning: [K20 Lab 2995](#).

This lab includes guidance for classification, similarity and clustering framework solutions, and Agent Workspace. Follow the entire lab if Agent Workspace is in scope for you. To get started with classification, similarity, or clustering only, sections 1.1.3 - 1.1.5 are all you need. Once you register you'll receive an email from Now Learning with access to a temporary practice instance.

### 2. Open your post-registration email from Now Learning.

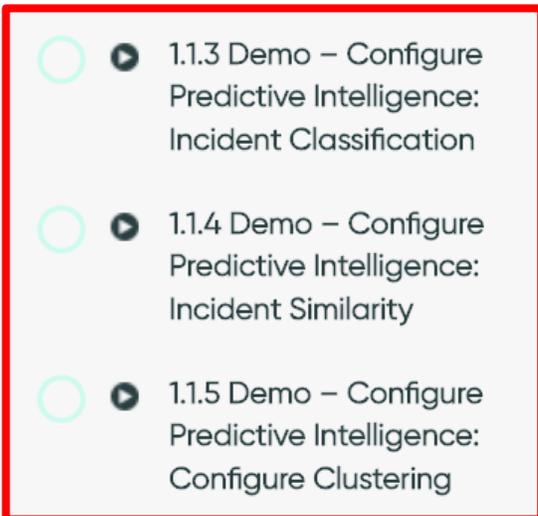
In this email you'll get access to a practice instance for three days. You could use your own sub-production instance, however the temporary instance has the benefit of pre-loaded practice data. If your three-day access expires before you're finished, you can register again for a new practice instance.



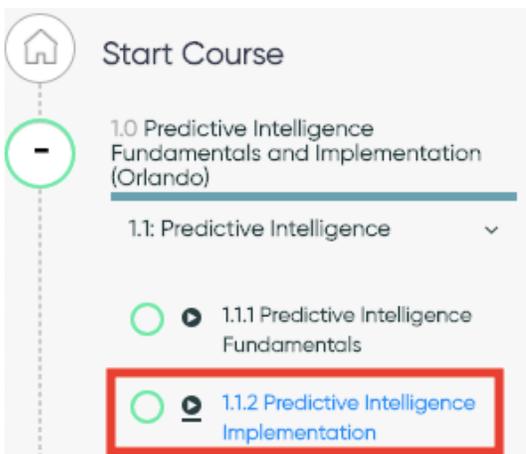
## Step 3: Try in your environment

When you begin configuration of classification, similarity, or clustering solutions re-access these two resources if you need a refresher on configuration:

- Sections 1.1.3-1.1.5 from the lab you completed in this workbook. Re-access it: [K20 Lab 2995](#).



- The Implementation section of the Predictive Intelligence Now Learning course. Re-access it: [Predictive Intelligence Fundamentals and Implementation](#).



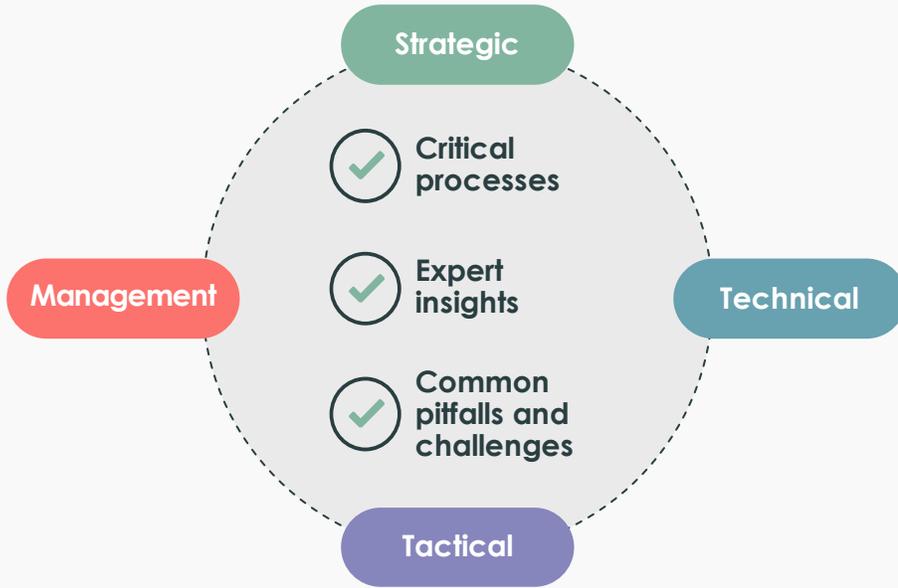
[Return to workbook checklist](#)

# Customer Success Best Practices

ServiceNow's Best Practice Center of Excellence provides prescriptive, actionable advice to help you maximize the value of your ServiceNow investment.



## Definitive guidance on a breadth of topics



### Designed for:



Executive sponsors



Platform owners and teams



Service and process owners

## Created and vetted by experts



Best practice insights from customers, partners, and ServiceNow teams



Based on thousands of successful implementations across the globe



Distilled through a rigorous process to enhance your success

## Proven to help you transform with confidence



Practical



Actionable



Value-added



Expert-validated

Get started today.

Visit [Customer Success Center](#).

Contact your ServiceNow team for personalized assistance.