

## Inventory of Tax Technology Initiatives: Case Study Overview

Title of the project		In-Year Reconciliation (IYR)
Jurisdiction		Revenue Ireland
Year when the project went live		Q4 2022
Project development duration (Time between project start and end date, including things like the design and implementation of the project. This can be expressed, for example, in months.)		The IYR project began development in June 2021 and was released in September 2022, following approximately a year and a half of development.
Brief description of the project (max. 100 words)		<p>The goal of the In-Year Reconciliation (IYR) project was to adjust taxpayers' tax liability in real time using up-to-date pay information from modernised PAYE systems. This process optimises the use of rate bands and credits, and updates exceptions based on income thresholds.</p> <p>This project aligns with Revenue's goal of ensuring accurate tax payments by Irish taxpayers. The IYR system uses Java architecture and a distributed event store and stream-processing platform to adjust PAYE cases in real time based on updates to various datasets. It's triggered by events like submitting a payslip, changing a customer's date of birth, adding bank details, or actions by Revenue caseworkers.</p>
Scope (Select those that fit best; more than one box can be checked.)	Tax Administration 3.0 Building Blocks	<input checked="" type="checkbox"/> Digital identity <input checked="" type="checkbox"/> Taxpayer touchpoints <input checked="" type="checkbox"/> Data management <input checked="" type="checkbox"/> Tax rule management and application <input checked="" type="checkbox"/> Strategy, governance and new skills
	Taxes covered	<input checked="" type="checkbox"/> Personal income tax <input type="checkbox"/> Corporate income tax <input type="checkbox"/> Value added tax / sales tax <input checked="" type="checkbox"/> Other taxes
	Taxpayers covered	<input checked="" type="checkbox"/> Individuals <input type="checkbox"/> Micro-businesses <input type="checkbox"/> Small and medium-sized business <input type="checkbox"/> Large business <input type="checkbox"/> Other taxpayers, e.g. non-profit organisations, charities, trusts
	Tax administration function covered	<input type="checkbox"/> Registration and identification <input checked="" type="checkbox"/> Assessment (processing of tax returns and payments) <input checked="" type="checkbox"/> Taxpayer services <input type="checkbox"/> Verification and compliance management <input type="checkbox"/> Collection <input checked="" type="checkbox"/> Dispute prevention and resolution <input checked="" type="checkbox"/> Other tax operational functions <input type="checkbox"/> Corporate support, e.g. IT, human resources, planning, finance, etc. <input type="checkbox"/> All other functions of the tax administration not included above
Select among the options if the project had an element of co-creation between your administration and other stakeholders		<input type="checkbox"/> Co-creation with other parts of government <input type="checkbox"/> Co-creation with private section business <input type="checkbox"/> Co-creation with other jurisdictions <input type="checkbox"/> Co-creation with other stakeholders
Targeted benefits from the implementation of the project		<input type="checkbox"/> Increase of revenue <input checked="" type="checkbox"/> Reduction of tax administration cost <input checked="" type="checkbox"/> Improvement of tax administration efficiency <input type="checkbox"/> Cost saving or efficiency improvement for other government bodies

	<input checked="" type="checkbox"/> Reduction of tax compliance burden <input type="checkbox"/> Improved taxpayer experience <input type="checkbox"/> Improved taxpayer skills and capabilities <input type="checkbox"/> Improved staff skills and capabilities <input type="checkbox"/> Other	
<p>If available, please provide links to public information about the quantitative benefits of the project</p>		
<p>Brief listing of the key success factors and the main challenges for the project. (Please provide a list only. A detailed description should be part of the case study itself. Max. 100 words)</p>	<p>Top 3 success factors</p>	<ul style="list-style-type: none"> <li>• IYR enhances customer service by facilitating timely and accurate tax payments, resulting in fewer taxpayer contacts to district offices.</li> <li>• Configuration options initially used for development now enable Revenue to toggle specific rules without code deployment. IYR's modular rules can be adjusted according to Revenue's business needs.</li> <li>• Revenue's IYR exemplifies the benefits of real-time reporting, driving the digital transformation of tax administration - practical implementation of Tax Administration 3.0.</li> </ul>
	<p>Top 3 challenges</p>	<ul style="list-style-type: none"> <li>• Code: In the initial development stages, processing a large volume of data (over 2.7 million cases) led to numerous exceptions in generating tax calculation inputs, stemming from various root causes. Uncaught exceptions during stream processing would result in the shutdown of the responsible thread on the respective node.</li> <li>• Complex Scenarios: Business Rules and Testing. The development team navigated numerous complex scenarios dictated by business requirements. Defining business rules and acceptance criteria for testing was essential for each scenario.</li> </ul>
<p>Additional information, such as links to further information (max. 100 words)</p>	<p><a href="https://www.revenue.ie/en/online-services/support/software-developers/pay-modernisation-technical-overview.aspx">https://www.revenue.ie/en/online-services/support/software-developers/pay-modernisation-technical-overview.aspx</a></p>	