

From Desktop to Cloud

How rhi Redeveloped its Legacy Software with Greater Speed, Flexibility and Analytical Power for Users



CASE STUDY



The Company

rhi is a global provider of specialized software solutions that support the development of large-scale energy infrastructure projects, including the construction of oil and gas facilities and pipeline networks.

One of rhi's core offerings is rhiCOMS, a unit rate contracting system designed to calculate the overall cost and labor hours based on each measurable unit of work, such as a number of meters of pipe, and scale that cost to meet project-specific requirements.

rhiCOMS also supports critical functions such as project progress measurement, tender management, and vendor selection. By benchmarking against a comprehensive historical database, the software plays a central role in enabling rhi's clients, including oil majors and upstream operators, to evaluate project bids and manage contracts more effectively throughout a project's lifecycle.

The Challenge

Although rhiCOMS had served the industry well since its launch more than 20 years ago, it was originally developed as a desktop application. **This legacy design created significant challenges as the needs of the business evolved.** For each new project, the team was frequently required to manually gather and interpret data from colleagues around the world. This process was time-intensive, especially when multiple vendors and pricing options needed to be analyzed.

As an example, projects often required comparison across several suppliers to determine not only the most cost-effective bid but also to account for ancillary costs such as delivery or special handling fees. Identifying these variables and performing accurate evaluations could take weeks. Additionally, raw data was often formatted inconsistently, requiring time-consuming reformatting and validation before it could be used effectively.

Limitations like these posed a major obstacle in a business environment where decisions increasingly need to be made in real-time. The existing system could no longer meet the demand for rapid, data-driven insights. rhi needed a more agile, centralized, and automated method.

“We wanted to transition to a cloud-based system, integrating a centralized database that could provide instant, automated data retrieval for rhiCOMS customers,” said Chris Baughurst, rhi’s Systems Manager.

The Solution

In need of transformation, rhi embarked on the redevelopment of rhiCOMS into a cloud-based platform. The primary objective was to **create a tool that could offer instant access to reliable, standardized data while maintaining the system’s core functionality and flexibility**. Chris Baughurst led the redevelopment effort, supported by a six-person team and Software Development Manager, Mark Pettifer.

To manage the complexity of the project and accommodate input from multiple internal stakeholders, **the team adopted an Agile development approach, guided by the Scrum framework**. Professional Scrum Trainer, Pawel Rola from Meirik Business Transformation, provided coaching and mentorship throughout the process, helping the team stay focused on delivering value quickly and iteratively.

“In theory, the Scrum framework is simple, but it can be hard to implement,” explains Pawel. “My role was to support the team and present the bigger ‘why?’, asking fundamental questions to keep focus on the business objectives, as well as guiding efficient Scrum implementation to support them in rapid and effective value delivery.”

The redevelopment strategy prioritized early and frequent feedback from business users. Instead of setting a fixed go-live date, **the team focused on continual progress and incremental releases, allowing them to respond to real-world challenges as they emerged**. This approach aligned with the Agile philosophy of failing fast by quickly identifying and addressing issues before investing further in development paths that might not meet user needs.

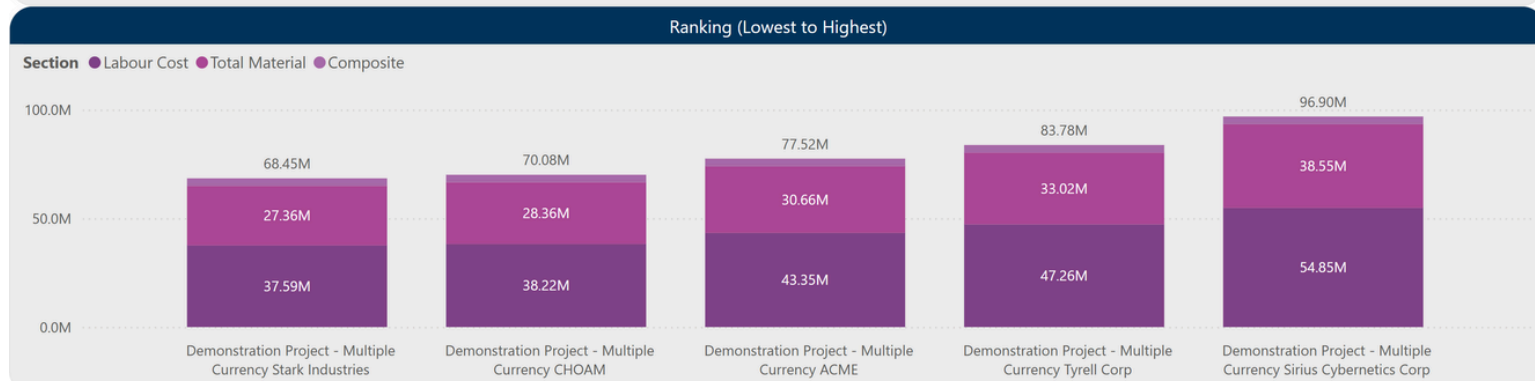
Workshops were held to align technology architecture with business goals, ensuring that development was driven by user value rather than legacy functionality. This collaboration

led to important insights, including the **decision to eliminate unused or redundant features and instead build new capabilities** such as integrated estimating tools and interactive data reporting through Microsoft Power BI.

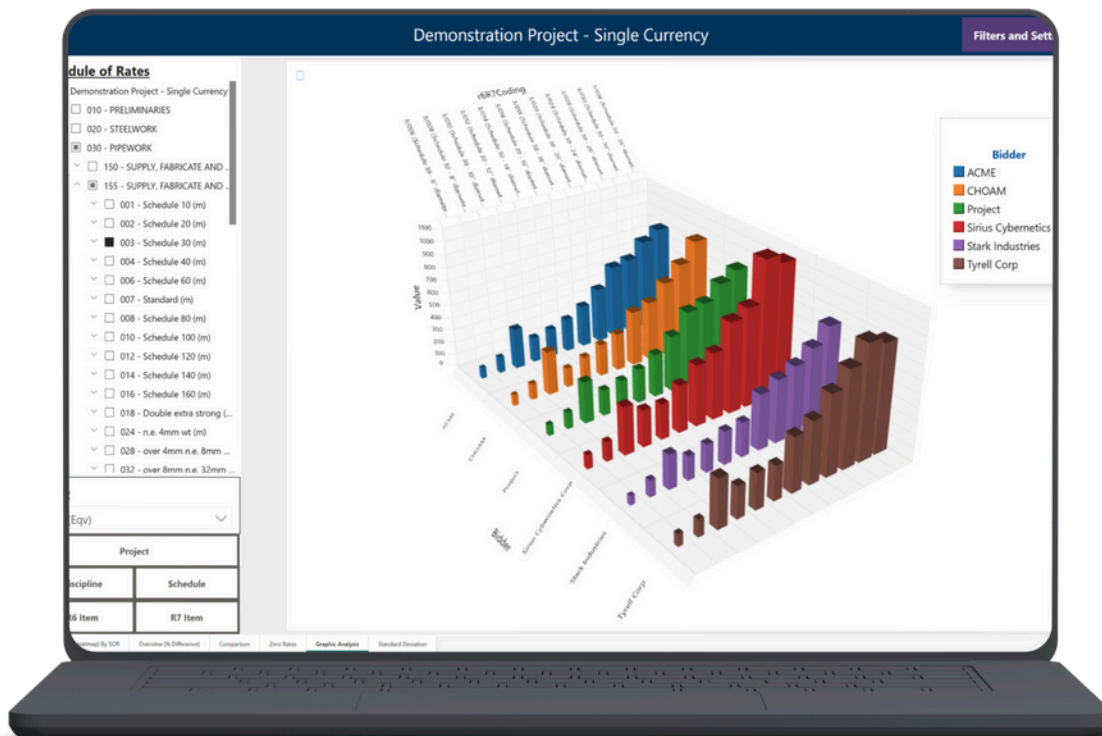
rhi Cost (Eqv) Demonstration Project - Multiple Currency Filters and Settings

Overall Ranking by Currency - Equivalent = US Dollar

Project BidderName Discipline	ACME			CHOAM			Sirius Cybernetics Corp			Tyrell Corp			Stark Industries	
	Labour Cost	Total Material	Composite	Labour Cost	Total Material	Composite	Labour Cost	Total Material	Composite	Labour Cost	Total Material	Composite	Labour Cost	Total Material
020 - STEELWORK	10,517,661	3,298,730		9,344,518	3,289,191		12,506,381	3,084,579		11,302,147	3,546,209		9,237,569	2,965,952
030 - PIPEWORK	6,477,945	10,112,860		5,623,851	9,419,326		8,312,161	13,177,809		6,966,431	10,727,616		5,918,399	8,881,183
040 - EQUIPMENT	6,162,164			5,793,336			8,114,069			7,056,311			5,595,045	
050 - ELECTRICAL	4,561,731	6,833,664		4,246,506	6,089,056		6,028,648	8,609,425		5,159,110	7,530,168		4,078,682	6,132,438
060 - INSTRUMENTATION	1,692,003	1,925,494		1,575,217	1,757,022		2,167,824	2,632,110		1,844,669	2,036,441		1,413,473	1,792,182
070 - TELECOMMUNICATIONS	243,679	247,883		234,555	244,540		307,977	350,128		261,041	278,273		192,446	221,982
080 - FIRE & SAFETY	1,249,107	1,577,150		1,123,992	1,337,132		1,677,390	2,130,726		1,358,088	1,684,070		1,052,505	1,306,515
090 - HVAC	620,748	703,109		556,265	656,466		794,738	885,857		682,388	718,433		584,390	606,460
100 - ARCHITECTURAL	790,992	525,751		743,789	454,039		1,098,244	663,129		866,823	560,588		676,787	519,223
110 - INSULATION	2,833,213	1,538,658		2,728,232	1,314,018		3,469,072	2,000,004		3,053,420	1,657,414		2,496,308	1,305,863
120 - PASSIVE FIRE PROTECTION	248,514	2,032,523		214,174	2,029,188		327,768	2,530,367		280,383	2,233,807		214,401	1,897,877
130 - PAINTING/COATINGS	7,955,879	1,868,986		6,040,217	1,769,775		10,043,628	2,487,593		8,428,827	2,047,271		6,132,074	1,726,282
270 - PROVISIONAL SUMS			3,500,000			3,500,000			3,500,000			3,500,000		
Total	43,353,638	30,664,809	3,500,000	38,224,652	28,359,754	3,500,000	54,847,900	38,551,725	3,500,000	47,259,638	33,020,289	3,500,000	37,592,079	27,355,956



rhiCOMS Power BI bid evaluation



rhiCOMS Power BI bid evaluation - graphic analysis

The Results

After a little more than a year of iterative development, the new cloud-based version of rhiCOMS was launched and has now been in use for more than six months. The improvements are already delivering measurable value to both customers and internal users.

For customers, the new system has drastically improved access to data. Project information is now available in real time, enabling faster and more informed decisions throughout the lifecycle of an energy project. The time required to conduct initial bid evaluations has been reduced from several weeks to just a few days, illustrating a significant gain in efficiency.

The transition also introduced **greater flexibility**. Previously, users were limited to defining a maximum of five currencies per project. The new system removes this cap, allowing an unlimited number of currencies to be added as needed. Similarly, where the desktop version restricted area references to three categories, the new system supports unlimited classifications, allowing users to define quantities in far more granular and meaningful ways.

Internally, the transition has required change management efforts to build confidence in the new platform. Since the cloud-based system was built from the ground up, some team members were initially hesitant about whether it would fully replicate the functions they relied on in the legacy version. Rather than discontinuing the desktop version entirely, rhi made the strategic decision to maintain it for projects that had already begun, easing the transition and allowing comparisons between systems as needed.

Over time, confidence in the new system has grown. Demonstrating the tool's capabilities on a project-by-project basis has helped internal users recognize not only that the new version can meet their needs, but also that it offers greater speed, flexibility, and analytical power. The standardized data format in the new platform enables deeper insights and more sophisticated analysis, further enhancing its value.

“Internally, we’re starting to achieve trust,” confirms Chris. “Stakeholders outside our team are seeing the benefits, not only based on customer reaction, but also through efficiency gains.”

Conclusion

The transformation of rhiCOMS from a legacy desktop tool to a modern, cloud-based platform has significantly improved the way rhi and its customers manage complex projects. By adopting an Agile mindset and implementing the Scrum framework, rhi was able to build a scalable and secure solution that delivers meaningful value with greater speed and accuracy.

The redevelopment has enabled rhi to meet the demands of a fast-paced, data-driven industry while empowering its internal teams to collaborate more effectively. Most importantly, the project has created a strong foundation for continuous improvement, with a system that is ready to evolve alongside customer needs.

As Chris notes, “The Scrum framework helped us to build the trust and confidence to redevelop a system that could deliver the necessary functionality, and that is also secure and scalable.”



About Meirik

Meirik is an international team of seasoned consultants and trainers providing business transformation, people development, and tailor-made professional training for businesses. Focused on deep and sustainable change, Meirik has a pragmatic and method-agnostic approach to provide the best results.



About Scrum.org

Scrum.org, the Home of Scrum, was founded by Scrum co-creator Ken Schwaber as a mission-based organization to help people and teams solve complex problems. We do this by enabling people to apply Professional Scrum through training courses, certifications and ongoing learning all based on a common competency model.

