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Whitepaper:  
Lightweight Solution  
Selection

# **CHOOSING THE RIGHT MANUFACTURING IT SOLUTION IN AN EVER-EVOLVING DIGITAL LANDSCAPE**

# Whitepaper: Lightweight Solution Selection

## Choosing the Right Manufacturing IT Solution in an Ever-Evolving Digital Landscape

By Miklós Patrubány, Managing Consultant, Business Advisory & Innovation, FrontWell Solutions

### Introduction

Due to the rapid evolution of technology, the traditional, lengthy digital solution selection and implementation processes have become obsolete.

Manufacturers demand their IT Departments to set up solutions that:

- produce tangible outcomes swiftly by agility in planning and implementation,
- allow incremental extension of features by modular system design,
- prioritize usability to achieve easy adoption and efficient handling,
- and also add value by digitizing and enhancing business processes.

All these conditions call for a Lightweight Solution Selection.

### Moving away from the rigid, old-school selection

The classic approach foresees a thorough but lengthy documentation of all aspects, processes, requirements that should be covered by the future solution, much like in a waterfall approach in software development, where all needs were deliberated on hypothetically and recorded before the start of the solution creation.

Being part of these selection processes, we have seen solution selection requirement lists as long as 900+ elements. This caused a tremendous effort to formulate, consolidate across the involved internal departments, to understand and answer by the proposing vendors and finally internally to evaluate the vendors' answers.

All these activities have generated considerable effort, costs, ultimately adding over one year delay to the implementation. This has resulted in loss of benefit realization by the solution and also requirements becoming partially obsolete due to regulatory / process / organizational / technology changes. In a commercial setting, nothing is provided without cost; thus, the vendor's additional efforts will be factored into the implementation costs, adding to the already elevated expenses of internal resources.

### The concept of Lightweight Solution Selection

The Lightweight Solution Selection approach we have applied supporting our clients finding the right solution is not reinventing the wheel, but rather making it spin faster through removing the unnecessary ballast.

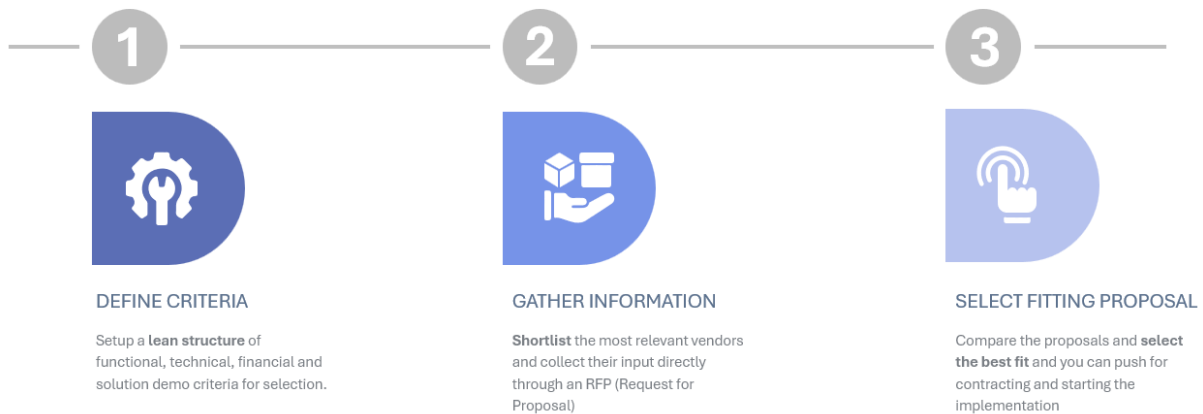
Our “secret” recipe is to:

1. Capture critical process phases instead of documenting the full process.
2. Define user stories instead of comprehensive URS (User Requirements Specification).
3. Create PoC (Proof of Concept) Scenario for critical functionalities instead of using classic E2E demo scenario.
4. Identify essential technical constraints instead of fully specifying all technical requirements.
5. Focus on TCO (Total Cost of Ownership) and its main cost components instead of detailed implementation itemization and costing.

### Applying the Lightweight Solution Selection

The key to promptly moving forward with your solution selection is to eliminate the 'overcautious' steps from the selection process and the 'academic grade' details from the selection criteria.

The selection process still has the three major steps: defining the criteria, gathering the information and selecting the fitting proposal, yet always with a leaner content.



#### 1. Defining the criteria

Defining the criteria must rely on a much leaner structure than in a classic solution selection to ensure the promptness and success of the process.

The lean criteria should focus on:

- Most relevant User Stories
- Technical/Administrative constraints
- Financial components
- Demo scenario

Continuous alignment with the responsible SMEs on the criteria definition is required.

Additionally in this phase the Evaluation metrics should also be set up and agreed upon by the relevant stakeholders to allow for instant evaluation of the vendor answers after their receipt.



#### FUNCTIONAL

Define the User Stories based on your most important processes



#### TECHNICAL / ADMINISTRATIVE

Gather the main technical and administrative constraints and blockers to make sure the solution avoids these



#### FINANCIAL

Focus on TCO (Total Cost of Ownership) and its main cost components



#### SOLUTION DEMO

Presentation of a demo scenario ensures common ground for comparison. Covering on top of the most critical process related activities also the administrative tasks

## 2. Gathering the information

This phase should be organized directly as a Request for Proposal, without spending time on preliminary rounds like Request for Information (RFI) or Request for Quotation (RFQ). Setting up the vendor shortlist based on the findings of large and well-established industry forums (e.g. Gartner Magic Quadrant, etc.) and moving to an RFP with the solution vendors allow for contracting and ultimately start of implementation directly after the closure of the selection process.

During this phase the solutions should be demoed by the vendors based on the most important user story identified during the definition of the functional aspects and evaluated by the participating SMEs. Using a lean and predefined scenario creates a common ground to compare the solutions.

In certain projects, we advised clients to move the realisation of initial benefits from the Implementation Phase to the Solution Selection Phase. This was done by defining a slightly more detailed User Story and having the top two vendors create a Proof of Concept based on it, which served as a comparison criterion. This small additional investment upfront allowed the client more time to build trust in the vendor and their solution, and it also accelerated the implementation phase by having the PoC ready as a framework for the Minimal Viable Product (MVP).

### 3. Selecting the fitting proposal

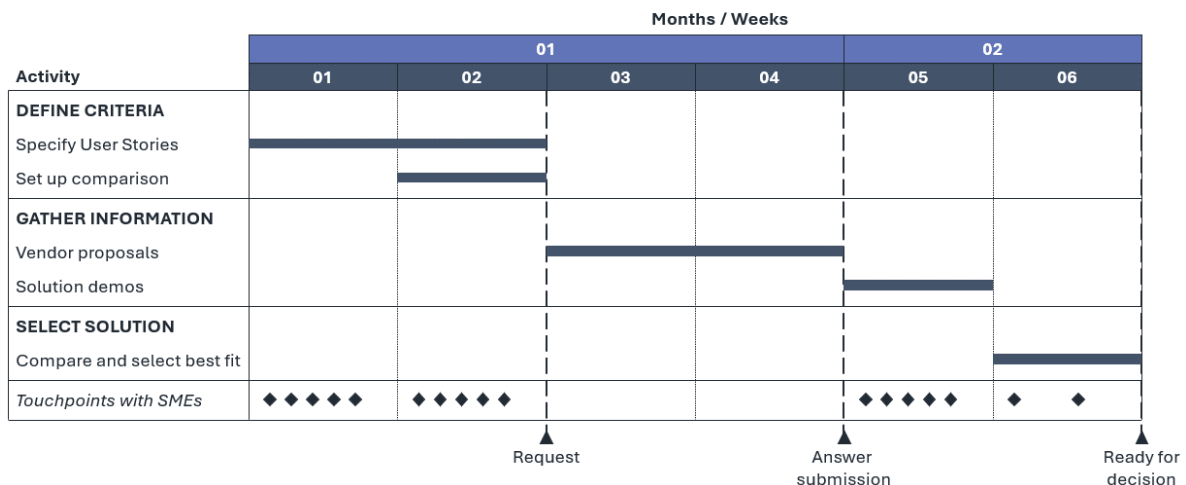
With all details prepared upfront in the criteria definition phase, reaching a conclusion in a transparent and well-documented manner can happen shortly after receiving the vendor proposals. The vendor answers inserted in the predefined evaluation forms render a relevant comparison with minimal data consolidation needs. Based on this a recommendation can immediately be created for the decision-makers about the best-fit solution.

Having the decision prepared allows the organization to move directly to contracting and starting the implementation of the solution.

#### Overall duration

We have found that following the above principles thoroughly can render the targeted solution selection result in as short as 6 weeks. Prerequisites for such quick realizations were:

- Empowered decision-makers on client side
- All relevant client SMEs available on short notice
- Fragments of documentations/criteria available from previous internal activities/workshops
- Crisp RFP timeline
- Prompt vendor answers.



### Conclusion

The emphasis on streamlined definitions, core elements, and addressing limitations makes the Lightweight Solution Selection approach ideal for manufacturers seeking easily implementable solutions tailored to their actual necessities.

The significant savings in time and money make this method suitable for both digital beginners embarking on their first digital solution implementation and digital leaders aiming to integrate the next specialized solution into their existing systems landscape.

Should you require assistance with the setup, please reach out to me at [miklos@frontwell-solutions.com](mailto:miklos@frontwell-solutions.com). Our Business Advisory and Innovation team is here to support you.

## Our Company

FrontWell Solutions is an expert in the digital transformation of the pharmaceutical manufacturing process. Our team of experts is engaged in providing digital solutions to 10 of the 20 leading pharmaceutical, biotechnology, chemical, and medical device companies and suppliers spanning Europe, the United States, and Asia.

Our expertise lies in delivering specialized consulting services, primarily centered around Manufacturing Execution Systems (MES), Laboratory Information Management Systems (LIMS), seamlessly integrating these Level 3 systems with Enterprise Resource Planning (ERP) platforms and driving Manufacturing Intelligence initiatives such as Overall Equipment Effectiveness (OEE) reporting.

We can support you with our senior industry experts from the Business Advisory and Innovation department to streamline the manufacturing IT solution selection getting you to the best-fit solution swiftly.

## Next Steps

Thinking about taking your next steps towards the digitalization journey? Our experts are ready to support you! Contact us under [ReachUs@frontwell-solutions.com](mailto:ReachUs@frontwell-solutions.com) or via +49 (6101) 595 89 85.