SPARC

Process analysis

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Contents

Introduction

This document provides documentation of the company's current processes, to have a clear vision and understanding of the current situation. The document will be organized in the following way: for each process there will be a visual representation of the process using BPMN notation, and then the analysis of it.

These are the processes:

1. **Member registration**
2. **Co-fundings**
3. **Invoicing**
4. **Semester Projects**
    a. **From research**
    b. **From partners**
5. **Project Reporting**
6. **Onboarding**

1. Member Registration Process

1.1 Process overview

Purpose

The main goal of this process is to register new company members into the SPARC network. This process involves identifying potential partners, conducting initial meetings, sending the necessary legal agreements, and ensuring the agreements are signed to formalize the membership.

Scope

The process starts when a potential partner company expresses interest in joining SPARC, usually triggered by a lead generated through various channels (professor recommendation, direct company inquiry). The process continues through stages of communication, meetings, and legal formalities. It concludes when the legal agreement is signed by both the company and the chairman, officially making the company a SPARC member, or ends if the company decides not to proceed or fails to sign the agreement after requested modifications.

Stakeholders

SPARC:

- **Partner Coordinator:** Manages communication with potential partners, organizes introductory meetings, and sends out the legal agreements. They are responsible for guiding the company through the registration process.

- **Chairman:** Signs the legal agreement once it has been approved and signed by the company, completing the membership registration.

Company Partner:

- **Company Representative:** The main point of contact during the registration process. They participate in meetings, review the legal agreement, and ensure it is signed and returned to SPARC. Their role is critical in deciding whether the company proceeds with becoming a member of SPARC.

Company

Visual Paradigm Professional[mdaffasptr(Fontys Hogescholen)]

Fontys / Partner Coordinator

Received interest from company

Choice of contact person

Excel

Lab invitation

Introduction meeting

Extensive SPARC information

Send Email

Want to become partner?

No answer → Follow-up email

No

Yes → Send draft legal agreement

Draft legal agreement

SPARC / Treasurer

Received draft LA

Create LA & NDA

LA & NDA

Send document to sign

Receive documents

Is it signed?

No

Received question

Answer question

Received signed document

Store document in archive

SPARC / Chairman

Yes

Sign document

Send signed document

Signed LA & NDA

4

1.2   Description of the Process

1. **Start Event:** Receive interest from company
   - **Role:** Partner coordinator
   - **Task Description:** The process starts when a lead is generated, meaning the company initiates contact with partner coordinator.
   - **Input:** Company interest
   - **Output:** Contact made with partner coordinator

2. **Task:** Choice of Contact Person
   - **Role:** Partners Coordinator
   - **Task Description:** Partner coordinator selects an appropriate contact person for communication with the company.
   - **Data Flow:** List of contact person
   - **Input:** List of available contact persons
   - **Output:** Selected contact person

3. **Task:** Lab Invitation
   - **Role:** Partners Coordinator
   - **Task Description:** A lab invitation is send to the company contact person.
   - **Data Flow:** Lab invitation email
   - **Input:** Lab invitation details
   - **Output:** Lab invitation email sent to the company contact

4. **Task:** Introduction Meeting
   - **Role:** Partners Coordinator
   - **Task Description:** An introduction meeting is conducted introducing, and details are shared with the company via emails.
   - **Input:** Agenda and meeting details
   - **Output:** Meeting summary and follow-up emails

5. **Intermediate event:** Send email
   - **Role:** Partner coordinator
   - **Event Description:** Partner coordinator sent an email to company after the meeting about the meeting summary along with extensive information about SPARC
   - **Input:** Meeting summary and SPARC details
   - **Output:** Email containing meeting summary and SPARC information

6. **Exclusive Gateway:** Does the Company Want to Become a Partner?
   - **Role:** Partner Coordinator
   - **Event Description**: Decision point to determine if the company is interested in becoming a partner.
     a. If there is no answer, the partner coordinator will send follow up questions to the company
     b. If "No," the process ends.
     c. If "Yes," proceed to create and send the draft version of Legal Agreement (LA) to SPARC treasurer.
   - **Input:** Company decision
   - **Output:** Decision response (Yes, No, or No answer)

7. **Task:** Create Legal Agreement (LA) & Non-Disclosure Agreement (NDA)
   - **Role:** Treasurer
   - **Task Description:** Treasurer finalize LA and NDA to be send to the company and chairman to be sign
   - **Input:** Draft version of LA and NDA
   - **Output:** Finalized LA and NDA documents

8. **Intermediate event:** Send document to sign
   - **Role:** Treasurer
   - **Event Description:** Treasurer send finalize LA & NDA to be sign by the company
   - **Input:** Finalized LA and NDA
   - **Output:** LA and NDA sent to the company

9. **Intermediate event:** Send document to sign
   - **Role:** Treasurer
   - **Event Description:** Treasurer receive signed LA & NDA from the company
   - **Input:** Signed LA and NDA from the company
   - **Output:** Signed documents from the company

10. **Exclusive Gateway:** Is the Legal Agreement Signed?
    - **Role:** Treasurer
    - A decision point to check if the Legal Agreement has been signed by the company.
      i. If "Yes," proceed to chairman for signature.
      ii. If there is a question, Treasurer will receive the question from the company and answer the question in pdf to be send back to the company.
      iii. If "No", process end
    - **Input:** Signed or unsigned LA and NDA
    - **Output:** Signed documents or questions from the company

11. **Task:** Sign document
    - **Role:** Chairman
    - **Task Description:** Once the Legal Agreement and NDA is signed by the company, it is send to the chairman for final signature.
    - **Input:** Signed LA and NDA from the company
    - **Output:** LA and NDA signed by the chairman

12. **Task:** Send document
    - **Role:** Chairman
    - **Task Description:** Once the Legal Agreement and NDA is signed by the chairman, it is send back to the treasurer to be store in archive.
    - **Input:** Signed LA and NDA by the chairman
    - **Output:** Documents sent to the treasurer for archiving

13. **Task:** Receive signed document
    - **Role:** Treasurer
    - **Task Description:** Treasurer receive signed LA & NDA from the SPARC chairman.
    - **Input:** Signed LA and NDA by the chairman
    - **Output:** Received documents ready for archiving

14. **Task:** Store document in archive
    - **Role:** Treasurer
    - **Task Description:** Treasurer store LA & NDA that have been signed by the company and the chairman in archive.
    - **Input:** Signed LA and NDA
    - **Output:** Archived LA and NDA

15. **End Event:**
    - The process ends after the Treasurer stored both signed LA & NDA in archive
    - **Input:** Completed and signed LA and NDA
    - **Output:** Archived documents

1.3   Bottlenecks

1. **Fragmented Communication Channels**
   - Communication between SPARC and potential partners is scattered across email, phone calls, and other platforms, leading to delays and miscommunication.

   Improvements:
   - **Centralization**: Implement a centralized platform, such as a Customer Relationship Management (CRM) system, to manage all communication effectively.

2. **Manual Legal Agreement Handling**
   - The manual process of preparing, sending, and tracking Legal Agreements (LAs) increases the risk of errors and slows down the workflow.

   Improvements:
   - **Automation**: Automate the creation, sending, and tracking of Legal Agreements through workflow automation tools.

3. **Inconsistent Introduction Meeting Content**:
   - The absence of a standardized protocol for introduction meetings results in varied quality and content, leading to potential misunderstandings about SPARC's value proposition.

   Improvements:
   - **Standardized Template**: Develop a standardized checklist and presentation template for introduction meetings.

4. **Delayed Agreement Follow-Up**:
   - Lack of structured follow-up mechanisms for unsigned Legal Agreements causes unnecessary delays in the onboarding process.

   Improvements:
   - **Automation**: Set up automated email reminders for companies to review and sign the Legal Agreement within a specified timeline.

5. **Limited Visibility into Agreement Status**:
   - Potential partners lack a clear view of the progress of their membership registration, leading to repeated inquiries and inefficient use of staff resources.

   Improvements:
   - **Status Tracker**: Create an online portal where potential partners can track the status of the membership registration process.

2. Co-funding Application Process

2.1 Process overview

Purpose

The main goal of this process is to evaluate and manage co-funding requests submitted by Fontys professors to SPARC. This process includes assessing the funding proposal, determining whether a meeting with the SPARC board is required, providing feedback for possible revisions, and ultimately processing the co-funding payment if the proposal is approved.

Scope

The process starts when a co-funding request is submitted, and the proposal is reviewed by the SPARC board. If the funding request is below 40,000, the board evaluates the proposal directly. For requests above 40,000, a meeting with the board is held before evaluation. The process ends when either:

- The co-funding payment is made to Fontys after approval, or
- The proposal is rejected, and feedback is provided, or
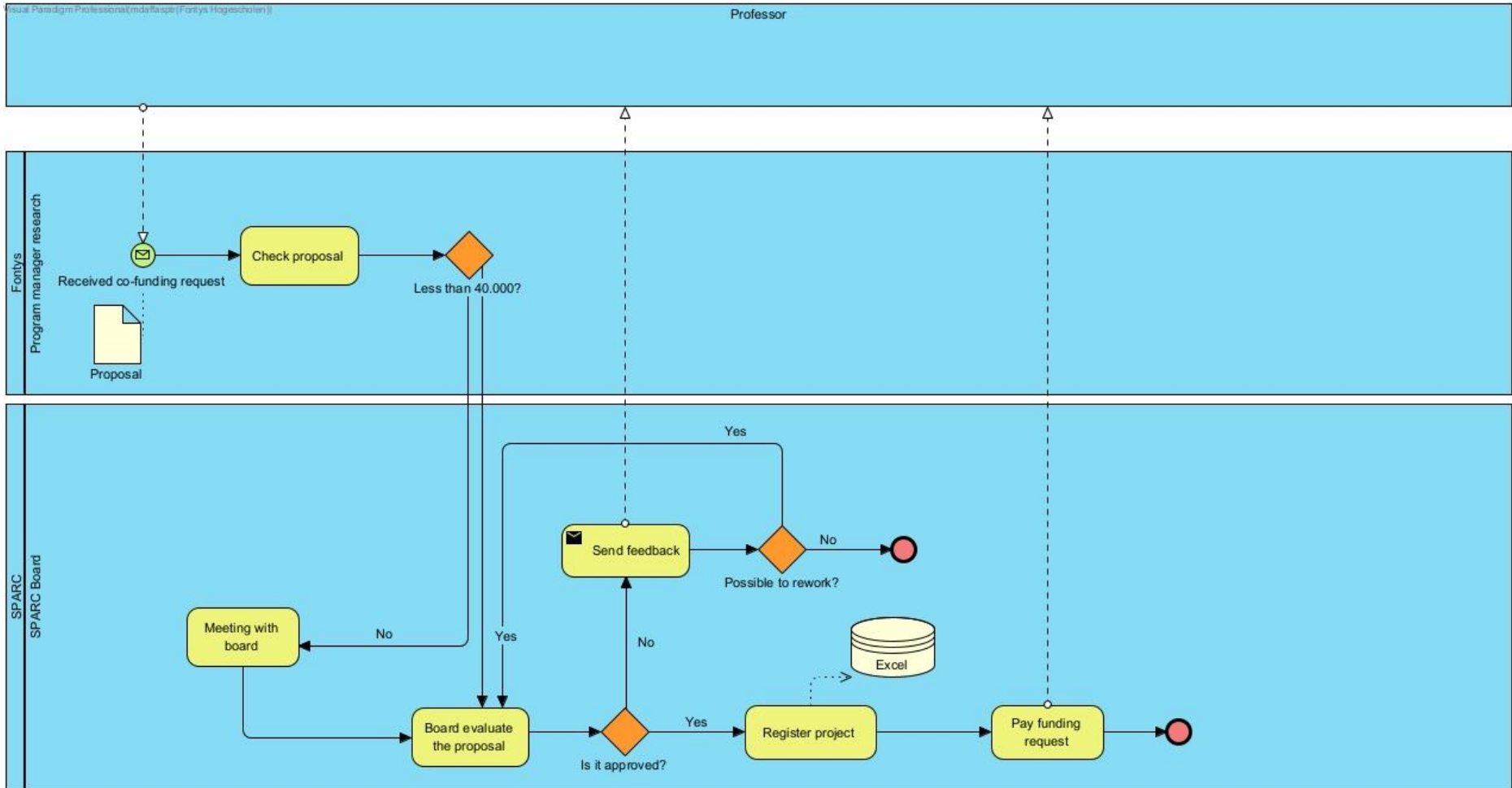- Modifications are requested, and the process loops back for re-evaluation.

Stakeholders

SPARC:

- **Project Manager Research:** Manages the co-funding request process and coordinates communication between Fontys and the SPARC board.

- **SPARC Board:** Evaluates the co-funding proposals and makes decisions regarding approval, feedback, and whether revisions are needed.

Fontys:

- **Professor:** Submits the co-funding request to SPARC, may be required to revise the proposal based on feedback, and receives payment from SPARC if the proposal is approved.

Visual Paradigm Professional(mdaffasptr(Fontys Hogescholen))

Professor

Fontys — Program manager research

Received co-funding request → Check proposal → Less than 40.000?

Proposal

SPARC — SPARC Board

Send feedback → Possible to rework? — No

Meeting with board ← No

Yes

Board evaluate the proposal → Is it approved? — No → Send feedback

Is it approved? — Yes → Register project → Excel → Pay funding request

10

2.1   Description of the process

1. **Start Event:** Co-funding Request.
   - **Role:** Program Manager Research
   - **Task Description:** The process starts when a co-funding request is submitted by the researcher to Program Manager Research.
   - **Input**: Co-funding request submitted by the researcher.
   - **Output**: Project proposal forwarded for review.

2. **Task:** Check proposal.
   - **Role:** Program Manager Research
   - **Task Description:** The Program Manager Research check the project proposal if it align with SPARC requirement.
   - **Input:** Project proposal.
   - **Output**: Reviewed project proposal.

3. **Exclusive Gateway:** Is the Co-funding Request Less Than 40,000?
   - **Role:** Program Manager Research.
   - **Input**: Reviewed project proposal.
   - **Output:** A decision point to check if the requested co-funding amount is less than 40,000.
       i.   If "Yes," proceed to board evaluation.
       ii. If "No," proceed to a meeting with the SPARC board.

4. **Task:** Meeting with SPARC Board
   - **Role:** Sparc Board
   - **Task Description:** A meeting is held with the SPARC board to discuss the co-funding request exceeding 40,000.
   - **Input**: Project proposal for amounts exceeding 40,000.
   - **Output**: Discussion notes and considerations for evaluation.

5. **Task:** Board Evaluates the Proposal
   - **Role:** Sparc Board
   - **Task Description:** The board reviews the co-funding proposal, which is sent via email for consideration.
   - **Input**: Project proposal (via email).
   - **Output**: Evaluation decision (approved or not approved).

6. **Exclusive Gateway:** Is the Proposal Approved?
   - **Role:** Sparc Board
   - **Input**: Evaluation decision.
   - **Gateway Description:** A decision point to determine if the proposal is approved by the board.
       i.   If "Yes," proceed to register project.
       ii. If "No," provide feedback.

7. **Task:** Send Feedback
   - **Role:** Sparc Board
   - **Task Description:** If the proposal is not approved, SPARC Board will create feedback and provide it to the proposer.
   - **Input**: Evaluation decision (not approved).
   - **Output**: Feedback for proposer.

8. **Exclusive Gateway:** Possible to rework?
   - **Role:** Sparc Board
   - **Input**: Feedback decision.
   - **Gateway Description:** A decision point to determine if modifications or rework on the proposal are possible.
        i. If "Yes," feedback is sent, and the proposal is resubmitted for re-evaluation.
        ii. If "No," feedback is sent explaining the reasons for the rejection, and the process ends.

9. **Task:** Register project
   - **Role:** Sparc Board
   - **Task Description:** The project will be registered in excel sheet containing list of projects
   - **Input**: Approved project proposal.
   - **Output**: Updated Excel sheet with registered projects.

10. **Task:** Pay funding request
    - **Role:** Sparc Board
    - **Task Description:** If the proposal is approved, SPARC Board will send payment to the requester.
    - **Input**: Approved project proposal and payment details.
    - **Output**: Payment to requester.

11. **End Event:** Process Concluded

    The process ends after payment is made or after feedback is provided without further rework.

2.2   Bottleneck

1. **Manual Validation of Funding Thresholds**
   - The current process requires the Program Manager Research to manually check whether the co-funding request exceeds the 40,000 thresholds. This slows down the process and increases the risk of human error.

     Improvement:

   - **Automation:** Implement an automated system to validate co funding requests against the 40,000 thresholds during the initial submission.

2. **Inconsistent Proposal Formats**
   - Proposals are often submitted in varied formats with missing or unclear details. This leads to back-and-forth communication to clarify information, delaying the evaluation process.

     Improvement:

   - **Standardized template:** Create a standardized template for project proposals, including mandatory fields and guidelines for formatting.

3. **Feedback Delays**
   - Drafting feedback for rejected proposals manually consumes time and effort, causing delays in providing proposers with clear and actionable guidance.

     Improvement:

   - **Automation:** Develop a system to automatically generate structured feedback for rejected proposals based on board evaluation outcomes.

4. **Decentralize Data Management**
   - The use of Excel for project registration results in scattered information and a lack of centralized access. This creates inefficiencies in tracking project statuses, funding, and payments.

     Improvement:

   - **Integration:** Replace the manual Excel-based project registration with an integrated project management system.

5. **Limited Transparency**
   - Proposers have no visibility into the status of their requests, leading to frequent follow-ups and unnecessary inquiries, which burden SPARC staff.

     Improvement:

   - **Status tracker:** Create an online portal for proposers to track the status of their co funding requests, including evaluation progress, feedback, and payment details.

3.   Invoice Process

3.1 Process overview

Purpose

The main goal of this process is to create the invoice for SPARC partners. This process includes the acquisition of information from the companies to be included in the invoice, the insertion in Exact online and the creation of the invoice that will be sent to the company, with relative payment and update in Exact.

Scope

The process starts when the legal agreement has been signed, (so when a company officially becomes member of SPARC), and the process ends when the invoice has been paid or when the company has not paid the invoice after 2 reminders, and consequently debt collector agency is contacted.

Stakeholders

Below are listed the stakeholders involved in the process.

SPARC:

- **Treasurer**: his role is to take care of the creation of the invoice and making sure that they are paid.
- **Member (company partner) contact person**: The role of the SPARC member is to be the bridge between SPARC and the partner company as this figure is a member of SPARC, but is also part of the partner company, and the member is the point of contact between SPARC and the company and is the one who receives reminders in case the invoices are not paid.

Company partner:

It is the partner company, and its role within this process is not defined. Communications are sent to this stakeholder, and they take care of paying the invoice, but their internal processes are unknown to us.

Visual of the Process
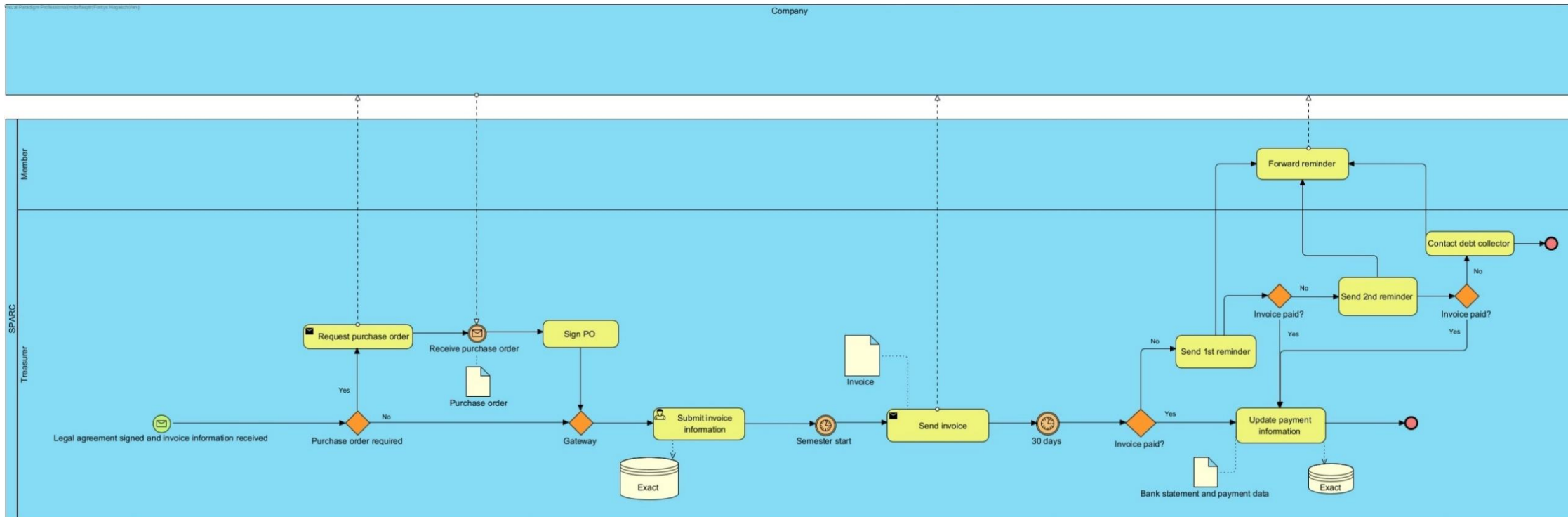
3.1   Description of the process

1. **Start Event: Legal Agreement Signed and Invoice Information Received**
   - **Role:** Treasurer
   - **Task Description:** The process starts when the legal agreement is signed, and invoice information is received.
   - **Input:** Finalized legal agreement and invoice details
   - **Output:** Stored legal agreement and invoice information

2. **Exclusive Gateway: Is a Purchase Order (PO) Required?**
   - **Role:** Treasurer
   - **Decision Point:** Check if a Purchase Order (PO) is necessary.
     - o **If Yes:** Proceed to request the PO.
     - o **If No:** Proceed to enter invoice information in Exact.
   - **Input:** Invoice details
   - **Output:** Decision if PO required or not

3. **Task: Request Purchase Order**
   - **Role:** Treasurer
   - **Task Description:** Request a PO from the company partner.
   - **Input:** PO request
   - **Output:** PO request sent to the company partner

4. **Intermediate Event: Receive Purchase Order**
   - **Role:** Treasurer
   - **Event Description:** Treasurer receives the signed PO from the company partner.
   - **Input:** Signed PO from company partner
   - **Output:** PO received and stored

5. **Task: Sign Purchase Order**
   - **Role:** Treasurer and Company Partner
   - **Task Description:** The PO is signed by both the SPARC treasurer and the company partner.
   - **Input:** Unsigned PO
   - **Output:** Fully signed PO

6. **Task: Enter Invoice Information in Exact**
   - **Role:** Treasurer
   - **Task Description:** Enter the required invoice information in Exact
   - **Input:** Invoice details
   - **Output:** Invoice entered in Exact

7. **Intermediate Event: Semester Start**
   - **Role:** Treasurer
   - **Event Description:** Treasurer waits for the semester to start (February/September) before sending the invoice.
   - **Input:** Semester start date
   - **Output:** Invoice ready to send

8. **Task: Send Invoice**
    - **Role:** Treasurer
    - **Task Description:** Send the invoice to the company partner for payment.
    - **Input:** Invoice
    - **Output:** Invoice sent to company partner

9. **Exclusive Gateway: Is invoice paid?**
    - **Role:** Treasurer
    - **Decision Point:** Check if the company has paid the invoice.
        - **If Yes:** Proceed to update payment information in Exact.
        - **If No:** Send a reminder after 30 days.
    - **Input:** Invoice payment status
    - **Output:** Decision on payment status

10. **Task: Update Payment Information.**
    - **Role:** Treasurer
    - **Task Description:** Update Exact with payment data, including the bank statement.
    - **Input:** Payment confirmation and bank statement
    - **Output:** Exact updated with payment details

11. **Task: Send Reminders**
    - **Role:** Treasurer
    - **Task Description:** Send payment reminders if the invoice is not paid within 30 days.
    - **Input:** Unpaid invoice details
    - **Output:** First and second reminders sent

12. **Task: Forward Reminders**
    - **Role:** Member (Company Contact Person)
    - **Task Description:** Send the reminders to the company partner.
    - **Input:** Reminders sent by treasurer
    - **Output:** Reminders send to company

13. **Task: Contact Debt Collector**
    - **Role:** Treasurer
    - **Task Description:** If the invoice is not paid after two reminders, contacting a debt collection agency.
    - **Input:** Unpaid invoice details
    - **Output:** Outstanding invoice forwarded to debt collector

14. **End Event: Process Concluded**
    - **Task Description:** The process ends when:
        - The invoice has been paid and Exact is updated
            - or
        - The debt collector has been contacted to handle payment.
    - **Input:** Payment status or debt collector involved
    - **Output:** Process ends with updated status

3.2   Bottlenecks

1. Dependence on Fontys Data
- The treasurer relies a lot on Fontys data, this cause delays and missing data in the invoice workflow.
- The lack of automation for data sharing between Fontys and SPARC can increase the risk of human error.

Improvements:

- **Centralized Data Management:** Integrate one single source of truth where data are stored, and different systems can retrieve the data from that source. The goal is to eliminate dependences on external sources, and rely only on one, this will ensure access to consistent and complete data. This will reduced manual data sharing, improved data quality and a single source of truth for financial transactions.

2. Separated Data Sources
- Data is stored across different platforms, for example in Exact and manual inputs, and this is make it difficult to have a single source of truth.

Improvements:

- **Centralized Data Management:** Integrate one single source of truth where data are stored, and different systems can retrieve the data from that source. The goal is to eliminate dependences on external sources, and rely only on one, this will ensure access to consistent and complete data. This will reduced manual data sharing, improved data quality and a single source of truth for financial transactions.

3. Data Quality Issues
- Data inconsistencies make it difficult to manage financial data effectively

Improvements:

- **Standardized Pre-Process Inputs:** Create a standardized process for collecting pre-invoicing data, with clear guidelines. This goal is to ensure consistent and accurate data collection before invoice generation. This will reduce the time spent clarifying or correcting information.

4. Manual Steps in Invoice Creation
- Manually gather invoice details, request purchase order, and update Exact creates time-consuming processes.

Improvements:

- **Enhanced Process Automation:** Automate the invoice creation and next process by using for example a predefined template and automated reminder within Exact. This will reduce the manual input errors and delays. The aim is to increase efficiency, with little human intervention.

4.   Semester Project Selection Process

4.1   Process overview

Purpose

The main goal of this process is to create a list of projects for the upcoming academic semester. It ensures that there are sufficient and relevant projects available for students, sourced from research groups or external partners. This process includes evaluating project proposals, assessing their fit for the semester, and registering approved projects for student involvement.

Scope

The process starts when the Semester Coordinator evaluates the need for new projects for the next semester, typically during the previous semester. It involves sourcing potential projects from research groups and external partners, reviewing their suitability, and adding them to the project list. The process ends when either:

- The required number of projects is registered and approved for the upcoming semester.
- All available project options have been exhausted, and no further projects are needed.

Stakeholders

SPARC:

- **Semester Coordinator (PLOU):** Oversees the project selection process, ensuring enough projects are available for students. They evaluate and register projects from both research groups and partners.

- **Partner Coordinator:** Serves as the direct link between SPARC and external company partners, facilitating discussions about potential projects and ensuring alignment with semester needs.
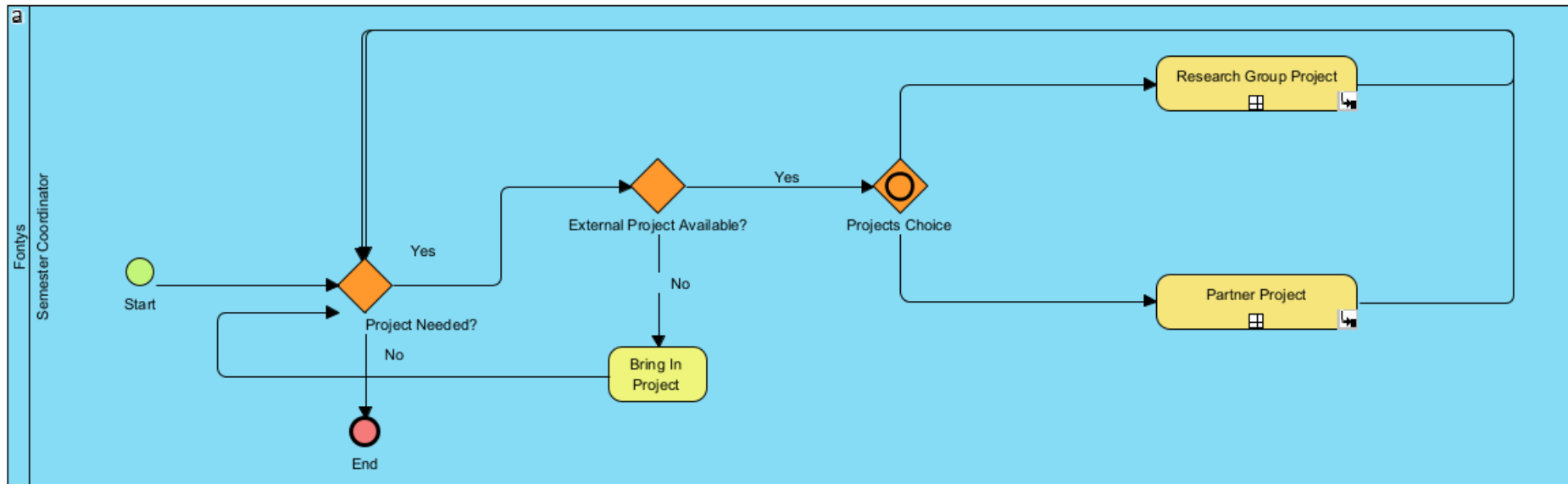
Research Groups:

- **Research Group Manager:** Manages the group of researchers and coordinates efforts to propose new projects. They ensure that the research group contributes to the pool of potential projects.

- **Researcher:** Proposes new projects based on ongoing research activities and academic objectives. They collaborate with the Semester Coordinator to refine and submit project proposals.

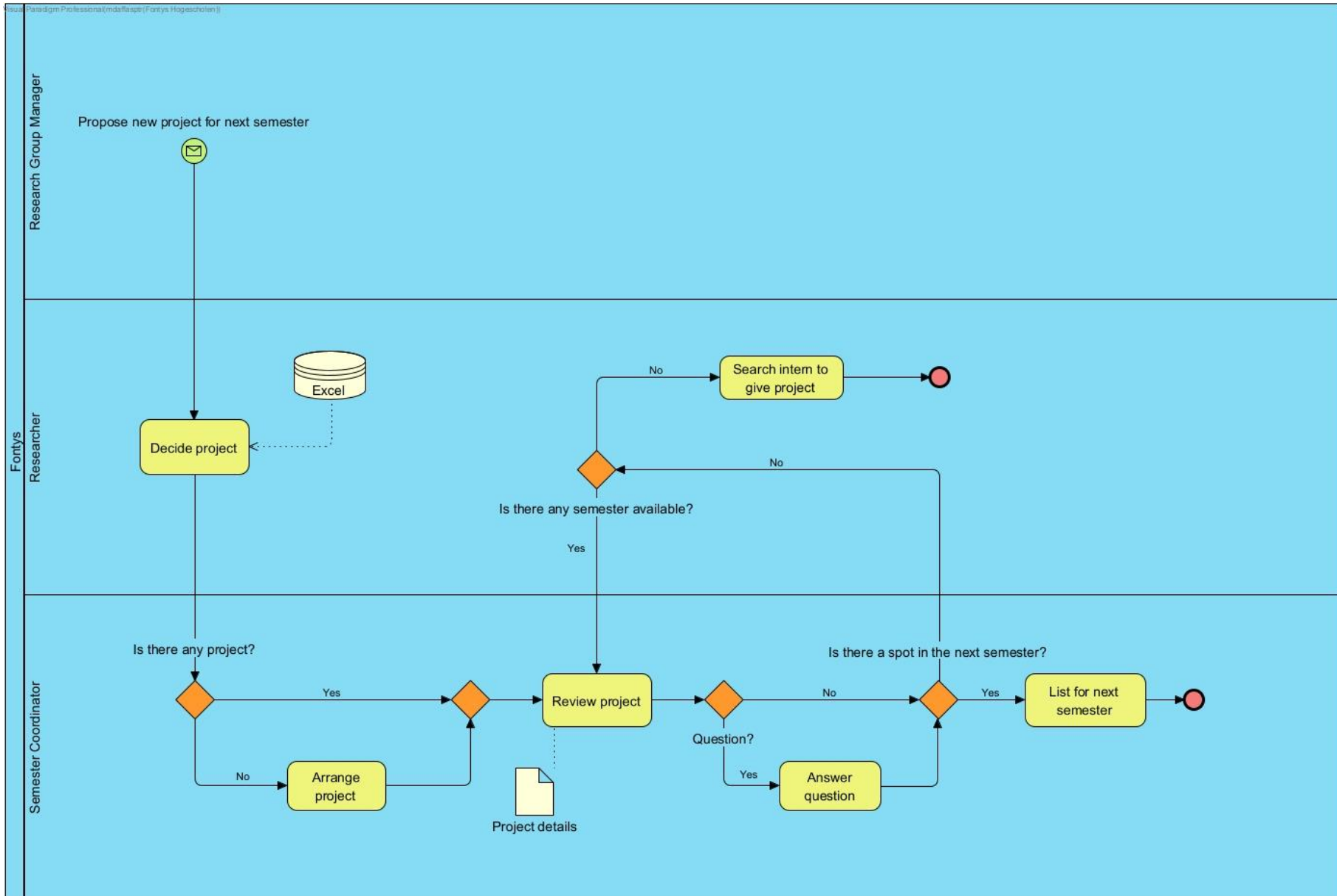**Company\Partners in Innovation (PI)**

- **Company:** Provides potential projects for students through partnerships with SPARC. They collaborate with the Partner Coordinator and Semester Coordinator to outline project details and ensure alignment with academic goals.
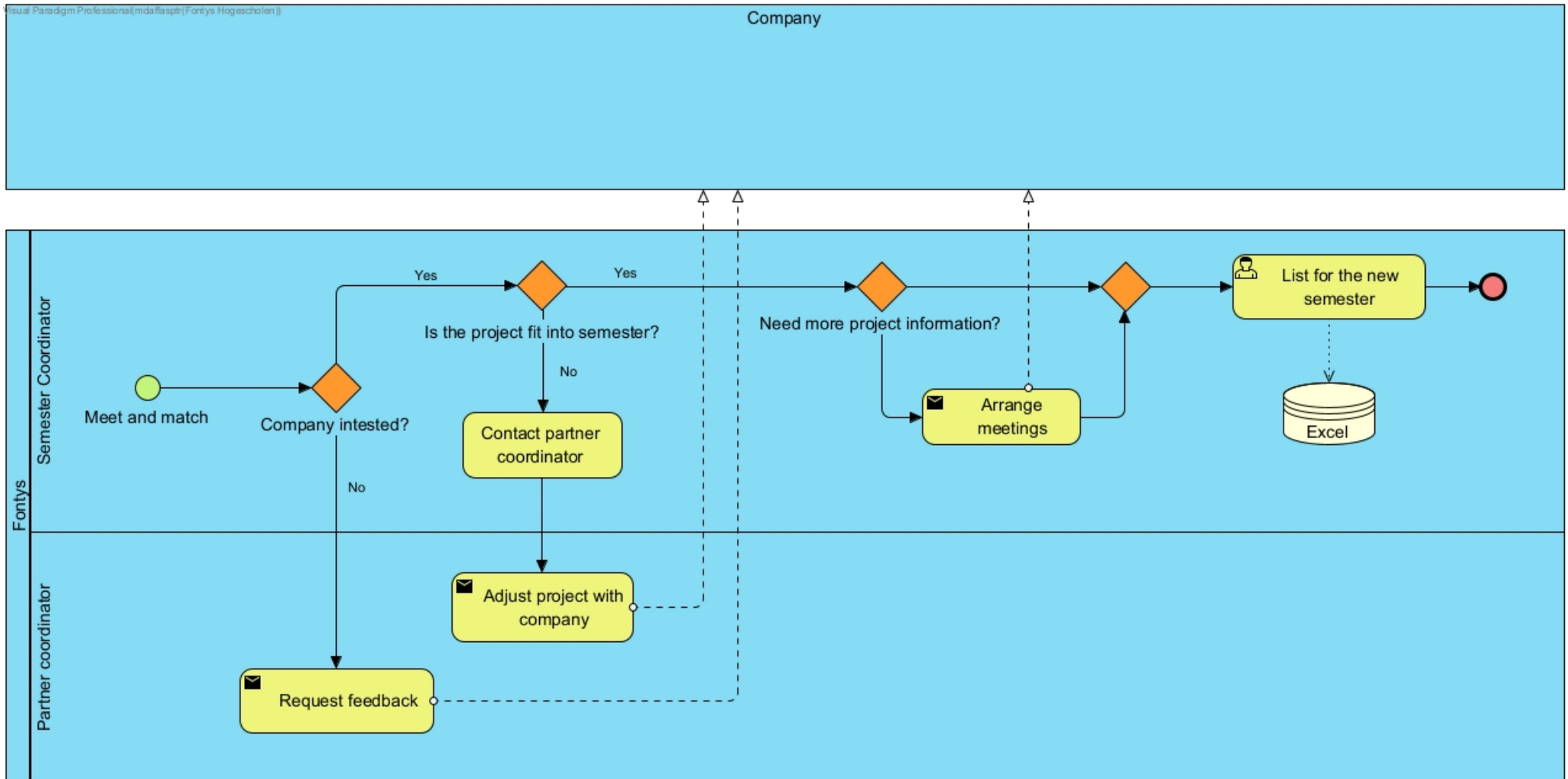
Semester Project Selection Process

Research Group Projects

Partner Project

4.2   Description of the process

Main Process

1. **Exclusive Gateway:** Are More Projects Needed?
    - **Role**: Semester Coordinator
    - **Input**: Current list of projects for the semester.
    - **Gateway Description**: A decision point to evaluate whether additional projects are required for the upcoming semester.
      If "Yes": Proceed to the decision point to choose the project source.
      If "No": The process ends.

2. **Decision Point:** Choose Project Source (Research Group or Partners)
    - **Role**: Semester Coordinator
    - **Input**: Availability and suitability of potential projects from both sources.
    - **Decision Point Description**: The Semester Coordinator decides whether to source the project from the Research Group or from Partners.
      Option 1: Proceed to "Project from Research Group" sub-process.
      Option 2: Proceed to "Project from Partners" sub-process.

3. **Task:** Register Project
    - **Role**: Semester Coordinator
    - **Task Description**: After selecting a suitable project from either source, the project is registered for the upcoming semester.
    - **Input**: Approved project details from the chosen source.
    - **Output**: Updated list of projects for the semester.

4. **Loop Back**
    - **Role**: Semester Coordinator
    - **Loop Description**: After registering a project, the process returns to the decision point *"Are More Projects Needed?"* to evaluate if further projects are required.
    - **Condition**: The loop continues until no additional projects are needed.

Sub-process: Project from Research Groups

1. **Task:** Research Group Manager Requests New Projects
    - **Role:** Research Group Manager
    - **Task Description:** The Research Group Manager asks researchers to propose new projects for the next semester.
    - **Input:** Current research priorities.
    - **Output:** Proposed project ideas.

2. **Task:** Decide Project
   - **Role:** Researcher
   - **Task Description:** Researchers review an Excel file containing a list of projects for the next semester and decide on potential projects to present to the Semester Coordinator.
   - **Input:** Excel file with project list.
   - **Output:** Selected project proposals.

3. **Exclusive Gateway:** Is there any project?
   - **Role:** Semester Coordinator
   - **Input:** Excel file with project list.
   - **Gateway Description**: A decision point to assess whether there is a spot available for the proposed project in the next semester.

   If "Yes": Proceed to review the project.
   If "No": Arrange to find a new project.

4. **Task:** Review Project
   - **Role:** Semester Coordinator
   - **Task Description:** The Semester Coordinator reviews the selected project to determine if it meets the criteria for the upcoming semester.
   - **Input:** Selected project proposals.
   - **Output:** Reviewed project proposals.

5. **Exclusive Gateway:** Question?
   - **Role:** Semester Coordinator
   - **Input:** Reviewed project proposals.
   - **Gateway Description**: A decision point to determine if the Semester Coordinator has questions about the project.

   If "Yes": The Semester Coordinator asks questions and receives answers.
   If "No": Proceed to check if there is a spot for the project in the next semester.

6. **Exclusive Gateway:** Is there any spot in the next semester?
   - **Role:** Semester Coordinator
   - **Input:** Reviewed project proposals and criteria.
   - **Gateway Description**: A decision point to check if there is an available spot for the project in the next semester.

   If "Yes": Proceed to list the project for the next semester.
   If "No": Researchers check if another semester is available for the project.

7. **Exclusive Gateway:** Is there any semester available?
   - **Role:** Researcher
   - **Input:** Reviewed project proposals.
   - **Gateway Description**: A decision point to check if there is another semester that requires a project.

   If "Yes": Proceed to review the project again for the selected semester.

   If "No": Researchers search for an intern to take the project.

8. **Task:** List Project for the Next Semester
   - **Role:** Semester Coordinator
   - **Task Description:** Once a suitable semester is found, the project is listed for the selected semester.
   - **Input:** Approved project and available semester.
   - **Output:** Project listed for the next semester.

Sub-process: Project from Partners

1. **Start Event**: Meet and match
   - **Role**: Company (Potential Partners of Innovation)
   - **Event Description**: A discussion is held during the meet-and-match session to introduce an overview of the available semester.
   - **Input**: Semester overview details.
   - **Output**: Company interest decision.

2. **Exclusive Gateway**: Is the Company Interested?
   - **Role**: Semester Coordinator
   - **Input**: Company feedback from the meet-and-match session.
   - **Gateway Description**: A decision point to determine if the company is interested in collaborating on a project.
     a. **If "Yes"**: Proceed to review project details.
     b. **If "No"**: The Partner Coordinator contacts the company to understand their decision and address concerns.

3. **Exclusive Gateway**: Does the Project Fit the Semester?
   - **Role**: Semester Coordinator
   - **Input**: Project proposal and semester requirements.
   - **Gateway Description**: A decision point to assess if the project aligns with the semester's requirements.

   If "Yes": The project is approved, detailed, and listed for the upcoming semester.

   If "No": The Semester Coordinator contacts the Partner Coordinator to adjust the project with the company.

4. **Exclusive Gateway**: Need more project information?
    - **Role**: Semester Coordinator
    - **Input**: Project proposal.
    - **Gateway Description**: A decision point to determine if the project proposal has uncleared or vague information.

    If "Yes": The Semester Coordinator arranges meetings with the company to discuss project details further.
    If "No": The project is approved, detailed, and listed for the upcoming semester.

5. **Task**: List for the next semester
    - **Role**: Semester Coordinator
    - **Task Description**: The approved project is submitted for the new semester and added to an Excel file containing the list of projects.
    - **Input**: Approved project details.
    - **Output**: Updated Excel file with the new project.

4.3   Bottlenecks

5. Project Reporting Process

5.1 Process overview

Purpose

The main goal of this process is to collect, review, and archive final project reports from students at the end of each semester. This process ensures that project outcomes are documented, accessible to SPARC, and available for future reference or assessment.

Scope

The process starts when the semester begins, with Fontys preparing to organize and manage project information. It involves requesting PLOU's to upload their final project reports into the Project Information Management (PIM) system, ensuring all required information is complete, and reviewing the submissions. The process ends when:

- All project reports are successfully submitted, reviewed, and archived in the PIM system, or
- Follow-up actions, such as reminders or revisions, are completed for incomplete or missing information.

Stakeholders

- **Fontys:** Review Project reports for completeness and accuracy, provide feedback if revisions are needed, and archive the finalized reports.

- **Partner Coordinator:** Coordinates with industry partners as necessary, especially if any additional project-specific details or evaluations are required.

- **PLOU:** Responsible for submitting their final project reports in the PIM system by the specified deadline.
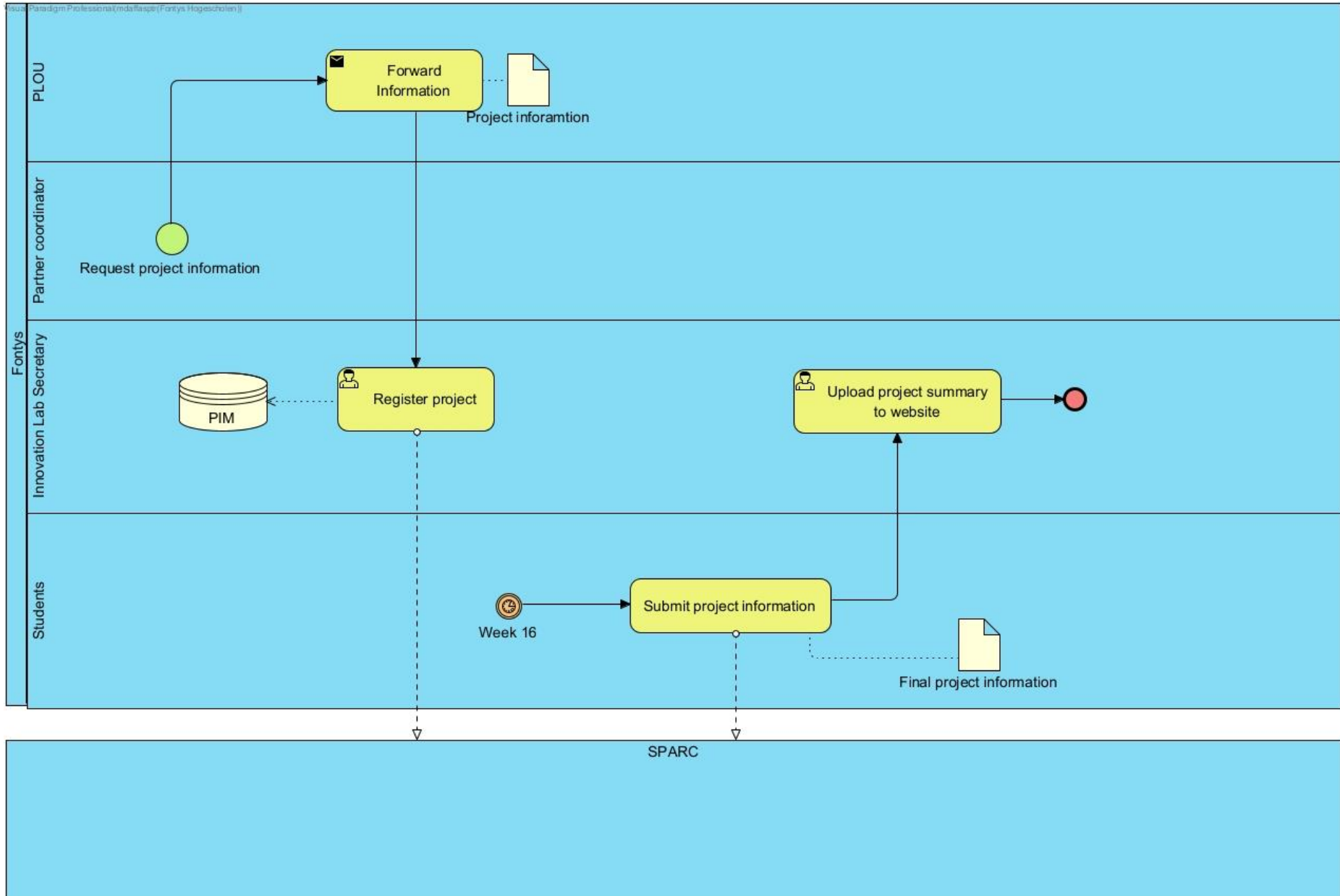
5.2   Description of the process

1. **Start Event: Request Project Information**
   - **Role**: Partner Coordinator
   - **Task Description**: The process begins when the Partner Coordinator initiates a request for project information from relevant stakeholders or sources.
   - **Input**: An email or formal request specifying the details of the required project information.
   - **Output**: A forwarded request to the PLOU

2. **Task: Forward Information**
   - **Role:** PLOU
   - **Task Description:** The PLOU receives the request and forwards the required project information to the next stage.
   - **Input:** Received email or document request from the Partner Coordinator. Project-related files could be Excel sheet, PDF's or Word documents containing the necessary details.
   - **Output:** A forwarded package of project related information to the Innovation Lab Secretary (via email)

3. **Task:** Register Project
   - Role: Innovation Lab Secretary
   - Task Description: The Innovation Lab Secretary registers the gathered project information in the PIM system, making it available for students, SPARC members, and other stakeholders.
   - Input: Received project-related information from the PLOU.
   - Output: Information received and put it in the PIM system.

4. **Task: Submit Project Information**
   - **Role: Students/PLOU?**
   - **Task Description:** By **Week 16**, students submit their final project information, they receive a link to a website where they can fill out that information.
   - **Input:** Student-completed project reports.
   - **Output**: Finalized project submissions recorded in the PIM System.

5. **Task:** Upload project summary to the website
   - **Role:** Innovation Lab Secretary
   - **Task Description:** After the student submitted the final project information, the Innovation Lab Secretary will update information to innovation lab website
   - **Input:** Upload project summary to innovation lab website
   - **Output:** The project information will be visible by the innovation lab website visitor

6. **End Event**
   The process ends once all student project information has been successfully submitted and recorded in the PIM system.

5.3   Bottlenecks

1. **Dependency on Forwarding Information by PLOU:**

   - If the PLOU delays forwarding the requested project information, it could hold up the entire process, as the subsequent steps rely on this information being passed on promptly.

   Improvements:

   - **Automation**: Implement an automated notification system (email or task management tool) to remind the PLOU of pending tasks and deadlines.
   - **Standardized Templates**: Provide standardized request templates or forms to reduce ambiguity and speed up data collection.

2. **Registration in PIM by Innovation Lab Secretary:**

   - If the Innovation Lab Secretary is overwhelmed or if there are inefficiencies in data-entry or access to the PIM-system, this could become a bottleneck. Any delays here might impact the availability of information for students and other stakeholders.

   Improvements:

   - **Digital Integration:** Use tools that allow automatic import of data (e.g., upload Excel or CSV files directly into the PIM system instead of manual entry).

   - **Real-Time Collaboration:** Implement collaborative software (e.g., Google Drive or a shared cloud system) where all stakeholders can upload and verify information simultaneously before formal registration.

3. **Lack of Feedback Loops:**

   - The process appears to have no mechanisms to verify or follow up on incomplete or incorrect information at each step. This might result in iterative delays if errors are identified later.

   Improvements:

   - **Verification Step**: Add a step where the Innovation Lab Secretary or PLOU verifies the completeness and accuracy of information before final registration in PIM.
   - **Flagging Mechanism**: Allow stakeholders (e.g., students, coordinators) to flag issues or missing data in the PIM system, prompting corrections early.

4. **No Parallelism in Tasks:**

   - Tasks like "Forward Information" and "Register in PIM" appear sequential, meaning one must finish before the other starts. If these tasks could be done concurrently or more efficiently, it might reduce delays.

   Improvements:

   - **Shared Access**: Use collaborative platforms that enable multiple stakeholders (PLOU, secretary, students) to input data simultaneously rather than waiting for one step to finish.
   - **Workflow Automation**: Employ workflow automation tools (e.g., Zapier, Microsoft Power Automate) to trigger actions (e.g., register data in PIM) as soon as a file or input is received.

6.   Member Onboarding Process

6.1   Process overview

Purpose

The purpose of this process is to onboard new members (companies) into the SPARC network. It ensures proper communication, the assignment of responsibilities, and the scheduling of follow-up meetings to build and maintain the relationship with new members.

Scope

The process starts after the new member signed the legal agreement. The partner coordinator and PLOU will be assign with the new member. After week 6, the meeting will be held to discuss about the progress of the project.

Stakeholders

- **Company (Contact person):** Receives shared materials, attends meetings, and collaborates during the offboarding of the company.

- **Partner Coordinator:** Responsible for onboarding the new member, managing communications and scheduling meetings.

- **PLOU:** Further connection within the project with the new member and supports collaboration efforts.
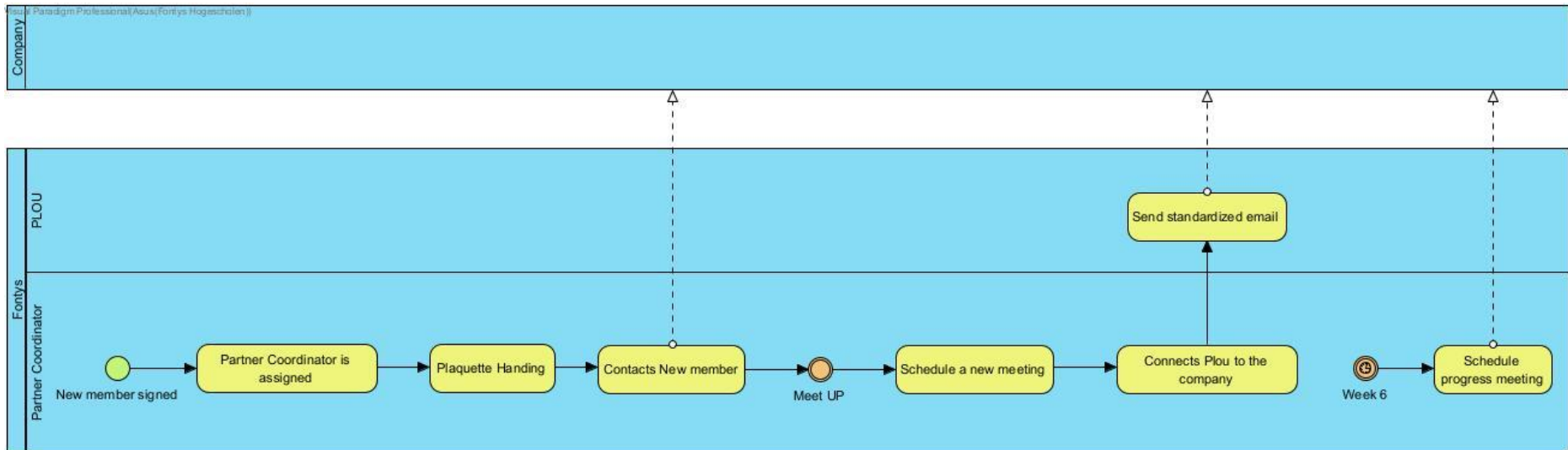
6.2 Description of the Process

1. **Start Event**: New Member Signed
   - **Role:** Partner Coordinator
   - **Task Description:** The process begins when a new member signs the agreement to join SPARC.
   - **Input:** Signed membership agreement.
   - **Output:** Confirmation of new member and initiation of the onboarding process.

2. **Task**: Partner Coordinator is Assigned
   - **Role:** Partner Coordinator
   - **Task Description:** A Partner Coordinator is officially assigned to manage the onboarding process for the new member.
   - **Input:** Assignment request or new member confirmation.
   - **Output:** Partner Coordinator assignment confirmation.

3. **Task**: Plaquette Handing
   - **Role:** Partner Coordinator
   - **Task Description:** The Partner Coordinator provides the new member with a plaquette or welcome package containing essential SPARC-related information.
   - **Input:** Prepared plaquette or welcome materials.
   - **Output:** Plaquette handed to the new member.

4. **Task**: Contact New Member
   - **Role:** Partner Coordinator
   - **Task Description:** The Partner Coordinator makes initial contact with the new member to establish communication and explain the next steps.
   - **Input:** Contact details of the new member.
   - **Output:** Successful contact and follow-up plan established.

5. **Task**: Meet Up
   - **Role:** Partner Coordinator
   - **Task Description:** A meet-up or introductory meeting is arranged to discuss expectations, roles, and future collaboration.
   - **Input:** Scheduled meeting invitation.
   - **Output:** Successful introductory meeting with the new member.

6. **Task**: Schedule a New Meeting
   - **Role:** Partner Coordinator
   - **Task Description:** The Partner Coordinator schedules a follow-up meeting with the new member to continue building the relationship and discuss progress.
   - **Input:** Agreement on meeting details.
   - **Output:** Scheduled follow-up meeting.

7. **Task**: Connect PLOU to the Company
   - **Role:** Partner Coordinator
   - **Task Description:** The Partner Coordinator connects the PLOU to the company for further coordination and support.
   - **Input:** Confirmation of PLOU involvement.
   - **Output:** Established connection between PLOU and the company.

8. **Task**: Send Standardized Email
   - **Role:** PLOU
   - **Task Description:** The PLOU sends a standardized email to the company with additional information, confirmations, or next steps.
   - **Input:** Email template and company-specific details.
   - **Output:** Standardized email successfully sent to the company.
   -
9. **Task**: Schedule Progress Meeting
   - **Role:** Partner Coordinator/PLOU
   - **Task Description:** A progress meeting is scheduled for Week 6 to review the status of the onboarding process and collaboration progress.
   - **Input:** Meeting schedule availability.
   - **Output:** Progress meeting confirmed and scheduled.

10. **End Event**: Progress Meeting Scheduled
    - The process ends when the progress meeting has been successfully scheduled, ensuring the new member has been fully onboarded into SPARC.