ASSIGNMENT 3: PROCESS AUTOMATION (CONTENT REVIEW AND CASE ANALYSIS) SPECIFICATION AND SUBMISSION LINK

INF30035: Business Process Management

OCTOBER 25, 2024

NGUYEN PHUC DONG TRAN

103804577

Executive Summary

This report delves into the adoption of process automation at Swinburne Guru Consulting (SGC), focusing on the implementation of Business Process Management Systems (BPMS) and Robotic Process Automation (RPA) to optimize the company's coaching specialist processes. The analysis begins with an exploration of the general benefits, drawbacks, risks, and opportunities associated with process automation, drawing insights from recent research and industry practices. It highlights how automation can enhance efficiency, accuracy, and agility in business operations, while also acknowledging challenges such as high initial costs, integration complexities, and potential employee resistance.

A detailed case study of SGC identifies key inefficiencies in the company's current processes like manual client onboarding, time-consuming payment verification, and scheduling delays. To address these issues, the report proposes specific automation solutions, such as automating the survey generation process, implementing RPA for sending payment reminders, and using BPMS for managing end-to-end client registration workflows.

The report also discusses the challenges of adopting BPMS and RPA at SGC, such as technical integration issues and change resistance from employees. It underscores the importance of considering automation as part of long-term business process improvement to ensure sustainable growth and adaptability in a competitive market. By strategically implementing BPMS and RPA, SGC can achieve a more efficient, agile, and client-focused operation, positioning the company for future success.

Finally, the report outlines an automation implementation plan, featuring a phased approach that includes assessment, system selection, process design, deployment, training, and continuous improvement. This plan ensures a smooth transition from manual to automated workflows, minimizing disruptions while maximizing efficiency gains.

Table of Contents

Part 1: Content Review

This section of the report provides insights into the advantages, disadvantages, risks, and opportunities of deploying process automation in organizations. It covers **Robotic Process Automation (RPA)** and **Business Process Management Systems (BPMS)**, with a discussion on how the knowledge gained from this unit can support future career development.

Process Automation

Research has highlighted various **benefits, drawbacks, risks, and opportunities** associated with process automation. According to Plattfaut and Borghoff (2022), the primary advantages include improved efficiency, accuracy, and speed in operations. The authors argue how automating repetitive tasks enables companies to allocate resources more effectively, which can lead to significant cost savings and increased productivity. For instance, automation allows employees to focus on strategic tasks rather than mundane activities, which can enhance overall business agility and decision-making capabilities

However, there are also notable drawbacks. **Syed et al. (2020)** note that the **initial implementation costs** can be high, and the transition to automated systems can disrupt existing workflows. The maintenance of automated systems can also require ongoing technical support and updates, which may strain the current resources within organizations, as well as higher the cost of IT operations (Syed et al. 2020; Fung 2014).

Additionally, process automation introduces several risks that must be carefully managed to ensure smooth operations. According to Kasowaki and Burak (2023), cybersecurity vulnerabilities are a primary concern for the adoption of process automation, as the integration of various systems increases the potential for cyberattacks and data

breaches. Some of the other risks that businesses might also need to consider include potential job displacement, the need for retraining IT staff, and the loss of personalized human interaction in automated processes (Fung 2014).

Despite these challenges, process automation presents **opportunities** for innovation and growth, making it a critical element for any organization's long-term improvement strategy. It can drive process optimization, support digital transformation, and help businesses scale their operations more effectively (Syed et al. 2020). Espina-Romero et al. (2024) argue that combining automation with advanced technologies like AI and machine learning enhances the ability to leverage predictive analytics and data-driven insights, enabling more informed decision-making and positioning businesses for long-term success.

Business Process Management Systems (BPMS)

BPMS is a strategic approach aimed at making organizational workflows more efficient and effective. Bartlett et al. (2023) emphasize the critical role of BPMS in the digital workplace, highlighting its ability to design, execute, monitor, and optimize business processes. It is a cornerstone of digital transformation, as it integrates various systems and processes, creating a unified framework that simplifies the management of complex workflows (Bartlett et al., 2023). BPMS also enables organizations to maintain agility, allowing them to quickly adapt to changing business needs and automate processes in alignment with their strategic goals (Szelągowski et al. 2023).

Szelągowski et al. (2023) further identify the advantages of BPMS, including enhanced process visibility and transparency, better enforcement of organizational rules, and reduced workloads through automation. BPMS also facilitates **flexible integration** with various IT systems, making it a versatile tool for modern businesses (Dumas et al., 2018). Research by Szelągowski et al. (2023) further demonstrates the value of BPMS,

noting that 96% of businesses using process optimization solutions reported significant returns on investment, with 55% achieving at least a 200% ROI.

Robotic Process Automation (RPA)

RPA is another key component in the digital workplace, especially in the context of business process management. According to Bédard et al. (2024), RPA involves using software bots to automate rule-based, repetitive, and error-prone tasks in business processes. The authors stress its significance lies in its ability to integrate seamlessly with existing systems without the need for extensive changes to IT infrastructure. RPA enhances productivity by minimizing human errors and reducing processing time, which is particularly beneficial for tasks that require high accuracy and consistency (Bédard et al. 2024). For businesses, RPA serves as a cost-effective solution for automating routine processes, which can reduce data entry expenses by as much as 70% as robots are able to work 24/7, highlighting its potential for driving competitive advantage (Bédard et al. 2024).

Automation Consideration for Long-Term Business Process Improvement Practices

BPMS and RPA together contribute to creating a more efficient, automated, and agile digital workplace. While BPMS focuses on managing and optimizing end-to-end processes, RPA excels at automating specific, repetitive tasks (Bartlett et al. 2023; Bédard et al. 2024). The combination of these technologies enables businesses to reduce costs, streamline operations, and respond swiftly to market changes, fostering greater efficiency and agility.

Considering automation as part of a long-term business process improvement strategy is essential because it allows organizations to sustain these benefits over time. By integrating BPMS and RPA, businesses can build a foundation for scalability and continuous improvement, adapting to evolving market demands and technological

advancements (Bartlett et al. 2023; Bédard et al. 2024). Automation also supports data-driven decision-making, leveraging insights to anticipate trends and optimize resource allocation, ensuring that businesses remain competitive and well-positioned for sustainable growth.

Reflection on How This Unit Helps Me In My Future Career

My professional career in the future will benefit greatly from the knowledge I have gained from this unit, especially in roles focused on business process management and digital transformation. Understanding the fundamentals of BPMS and RPA has equipped me with the skills to identify, analyze, and optimize workflows in various organizational settings. This ability to streamline processes will enable me to drive efficiency and innovation in a business environment, which makes me a valuable member of any team.

The course's emphasis on process mapping and automation tools has provided me with a practical understanding of how to leverage technology to improve process efficiency. For instance, learning to integrate BPMS into existing IT systems allows for smoother digital transitions and can support companies in adapting to rapidly changing market demands. In my future career, what I learned in this unit will help me implement solutions that can enhance process visibility, ensure compliance, and foster agility within organizations.

Moreover, working collaboratively within a team to identify critical issues, develop solutions, and create AS-IS and TO-BE models for a specific case study has greatly enhanced our professional communication and teamwork skills. This experience has not only improved our ability to analyze and solve complex problems together but has also prepared us to be valuable contributors in any future team setting.

Overall, this unit has provided me with a solid foundation in both technical and strategic aspects of process management, preparing me to contribute effectively to digital

transformation initiatives in my future career. Having understood BPM principles and had the ability to develop and redesign business processes, I would be able to promote process improvements and innovation inside organizations.

Part 2. Adopting RPA in Swinburne Guru Consulting (SGC) Coaching Specialist Processes

RPA Application Benefits and Challenges

The adoption of **RPA** in SGC's coaching specialist processes has the potential to revolutionize task management, particularly for activities that are repetitive, time-consuming, and susceptible to errors. Building on insights from the **Content Review**, RPA can significantly optimize workflows by minimizing manual intervention, which in turn enhances overall operational efficiency. This technology enables SGC to automate routine tasks, streamline processes, and improve service delivery. However, implementing RPA also presents challenges, especially for SME organizations like SGC, where resources may be more limited (Teunissen 2019).

This section explores how RPA can effectively address several key challenges highlighted in SGC's **To-Be models** (detailed in the Appendix). It also discusses the primary benefits of using RPA for process improvement and outlines potential challenges that may arise during the implementation phase.

Process Problem Solved	Task Automated	Key Benefit	Challenges
Manual and resource-consuming in the **Invoice Generation and Sending** process (in the Main process)	RPA can automate the generation and sending of invoices task once the bookkeeper has finalized the fee amount that the client must pay.	Streamlines repetitive invoicing tasks, reduces workload, and ensures consistent communication with customers.	Clients may have specific requirements for the format or content of their invoices, such as details about services or custom notes. RPA systems may struggle with this level of customization, especially if the requirements vary significantly from client to client.
Manual payment checking in the **Payment Verification** process (in the Main process)	The receptionist currently needs to constantly check if any payment was made by the customers and proceeds to cancel the assignment if no payment received after 1 week. RPA can automate this manual task by automatically checking the status of customer payment.	Reduces delays in verifying payments and minimizes workload for the receptionist. This is particularly beneficial if the number of assignments submitted increases. The RPA adoption leads to reduced bottlenecks and quicker assignment creation, eventually improving customer experience.	Data accuracy is critical in this task since any errors in verifying payments could lead to issues in the assignment process or client dissatisfaction. As a result, precise programming and data handling is essential.
Manual confirmation in the	RPA can streamline the process by automatically sending confirmation notifications to clients and coaches shortly before a coaching session begins. It can handle routine cases,	Increases efficiency by quickly handling standard cases without manual intervention. It also frees up	The RPA must be able to identify standard cases that can proceed automatically while recognizing special situations, such as rescheduling requests,

Verify Assignment subprocess	such as confirming sessions when both parties are ready, following a standard workflow (happy path). In more complex scenarios—such as when a client or coach requests to reschedule or cancel a session—RPA can flag these exceptions and escalate them to the Verifier.	the Verifier to focus on more complex situations that require personalized attention, like rescheduling or cancellations, which enhances productivity and maintains flexibility. Additionally, this approach ensures timely and consistent communication, improving client satisfaction while enabling SGC to scale operations without a significant increase in administrative tasks.	that require manual intervention. This involves complex programming to distinguish between routine and exceptional cases.
Manual and time-consuming in the **Conduct Survey** subprocess	Currently, the client relations officer manually generates survey reports, sends them to clients and coaches, waits for responses, and then compiles the feedback into a single report. Generating, sending surveys to both parties, and compiling them can be achieved with the adoption of RPA	Eliminates the time-consuming process of manually creating and distributing surveys, allowing the client relations officer to focus on more strategic activities. Additionally, automating the compilation of responses into a single report speeds up the process of analyzing feedback, leading to quicker insights into client and coach satisfaction, which can be used to improve service quality and client retention.	Customization remains a significant challenge as feedback needs to evolve, therefore surveys may need to be regularly updated or tailored to gather specific insights. This requires maintaining flexibility in the RPA system to adjust survey content and questions as needed.
Manual applying and calculating discount in the Payment process	Currently, the bookkeeper manually verifies client discounts, applies them, and calculates the final amount before sending it to the receptionist. RPA can automate this process by checking for	Streamlines workflow, reducing the risk of errors, and speeds up the payment process, allowing for quicker communication with clients	Automating the application of discounts involves handling **complex discount rules**, which can be difficult for RPA to manage if there are numerous conditions or criteria to apply. For example, discounts might vary based on client types or

(in the main process)	eligible discounts, applying the deductions, and calculating the final amount, making it ready to be sent to the receptionist.	and ensuring a smoother overall experience.	specific promotions, requiring detailed programming. Additionally, **changes in discount policies** can pose a challenge, as the RPA would need updates whenever new discount rules are introduced or old ones are modified. This requires ongoing monitoring and adjustments to keep the automation aligned with current business practices.

Short- and Long-Term Consideration of Process Automation Using RPA

For SGC Management, considering process automation using RPA is crucial for both short-term and long-term business process improvement.

In the short term, RPA can deliver immediate gains by streamlining repetitive tasks like session confirmation, payment verification, and survey generation, which are often time-consuming and prone to human error. This allows SGC to improve operational efficiency, reduce the workload on staff, and enhance client satisfaction through faster service delivery (Munusamy et al 2010). Automating these processes can also help SGC remain agile, enabling a quick response to sudden increases in client demand without needing to proportionally increase staffing levels. For these reasons, this makes RPA a valuable tool for cost reduction and optimizing resources.

In the long term, RPA supports sustainable growth and is a key enabler of digital transformation. It allows SGC to scale its operations effectively, handling higher client volumes without the need for significant changes in infrastructure or staffing. The automation of key processes within SGC in the long run also ensures that the company can maintain consistency and reliability in its service delivery, which is crucial for client retention and reputation management (Trasorras et al. 2009). Additionally, RPA can integrate with advanced technologies like AI and machine learning, providing opportunities for predictive analytics and more data-driven decision-making (Espina-Romero et al. 2024). This long-term vision aligns with the goal of maintaining competitive advantage in a rapidly evolving market by offering consistent, high-quality service.

However, SGC must also consider the challenges of implementing RPA, such as ensuring data accuracy and the need for ongoing technical support. Addressing these challenges early on ensures that the organization can maximize the return on investment in automation technology. Therefore, process automation using RPA is not only a strategic

move for short-term gains but also a critical investment in SGC's long-term success and process improvement journey.

Part 3. Adopting BPMS in Swinburne Guru Consulting (SGC) Coaching Specialist Processes

If Automation Using BPMS a Solution for SGC's Current Process Problems

Automating processes using BPMS is a highly suitable solution for addressing many of SGC's process challenges, as it provides a systematic approach to managing workflows and boosting overall efficiency. BPMS can streamline essential tasks like creating assignment, conducting surveys, and handling payment, offering a structured and efficient approach to process automation that aligns with SGC's operational needs

Dumas et al. (2018) identify four key advantages of implementing BPMS in organizations, including **workload reduction**, **flexible system integration**, **execution transparency**, and **rule enforcement**. These capabilities make BPMS especially effective for managing complex workflows, such as those found in SGC's coaching specialist processes. Based on the case study of SGC **To-Be models**, several key issues such as time-consuming invoicing and payment process, verification delays, and manual back-and-forth communication can be addressed through BPMS. The table below demonstrates the benefits of BPMS to SGC and how they align with the advantages proposed by Dumas et al. (2018):

Advantage	Description	Relevance to SGC
Workload Reduction	BPMS automates routine tasks, reducing the need for manual effort and	Enables faster processing of tasks like verifying assignments, processing client registrations, requesting surveys, and sending invoice

	minimizing delays caused by handovers	reminders, which reduces workload on staff so that they can focus on more strategic activities. Therefore, this can lead to faster assignment creation and more seamless experience for SGC's clients.
Flexible System Integration	BPMS integrates different IT systems, allowing for seamless data flow and communication across platforms.	Allows SGC to connect assignment management, payment systems, and scheduling tools into a cohesive framework. This integration minimizes the need for "island automation," where systems operate in isolation, and instead fosters a streamlined data flow across different platforms. Such integration ensures that SGC can manage its processes more efficiently, adapt quickly to changes, and easily update workflows without needing to modify underlying software code.
Execution Transparency	BPMS offers real-time visibility into the status of ongoing processes, including active and completed workflows.	Enables the management team to monitor the progress of client interactions, payment verifications, and coaching assignments. Such transparency ensures that management can quickly identify bottlenecks and intervene where necessary, improving overall service delivery and client satisfaction.
Rule Enforcement	Ensures that processes adhere to predefined rules and standards, automatically enforcing organizational policies.	For SGC, the automation of the enforcement of payment rules, coaching assignment criteria, and session verification steps reduces the risk of human error and ensures compliance with company policies. This is particularly valuable for maintaining consistency and quality in service delivery.

Benefits of BPMS (Dumas et al. 2018)

However, the initial implementation costs and complexity of process modeling must also be considered. For an SME like SGC, the upfront investment might be significant, but the benefits of increased efficiency and streamlined operations could outweigh the initial challenges in the long term.

Importance of Considering BPMS for Long-Term Business Process Improvement

In the context of SGC's long-term business goals, adopting BPMS for process automation is critical in different key areas:

- **Sustainability and scalability**: BPMS enables scalable automation (Ouyang et al. 2021), allowing SGC to grow without significantly increasing administrative workload. As the To-Be models suggest, automating tasks like session verification and payment processing ensure that these processes can handle higher volumes of clients without requiring proportional increases in staff. This makes BPMS a strategic choice for long-term growth.

- **Continuous improvement**: Dumas et al. (2018) argue that BPMS provides real-time data on process performance, which is essential for continuous improvement. SGC can use this data to identify bottlenecks and optimize workflows over time, ensuring that the organization remains agile and responsive to changing client needs. For example, data on client feedback loops could help SGC adjust its processes to better match client preferences.

- **Digital transformation and readiness for the future**: By integrating BPMS, SGC positions itself as a digitally enabled organization capable of leveraging emerging technologies like AI and machine learning. Szelągowski et al. (2023) believe that BPMS serves as a foundation for future digital initiatives, which allows SGC to integrate new tools without needing a complete system overhaul. This is vital for maintaining competitiveness and adapting to evolving market trends.

For these reasons, BPMS is not only a short-term solution for immediate process inefficiencies but also a strategic investment for long-term efficiency, scalability, and adaptability.

Limitations and Challenges of Transforming Human-Controlled Process to BPMS-Controlled Process

Transforming SGC's Coaching Specialist Processes from human-controlled to BPMS-controlled processes can solve many issues, such as manual verification and inefficiencies in payment processing, but it also presents several challenges specific to SGC's context and the proposed To-Be models. Dumas et al. (2018) categorize these challenges into technical and organizational limitations, both of which are relevant to SGC's situation.

Technical integration challenges are a significant concern when implementing BPMS. Dumas et al. (2018) note that integrating BPMS with existing systems, such as client databases and payment platforms, can be complex, especially if the current systems are outdated. SGC's legacy systems may not be equipped with the latest technology, increasing the risk of errors and disruptions during integration. Ensuring smooth data transfer and synchronization across all systems without interruptions will be a critical hurdle for SGC.

On the organizational side, resistance to change is a common challenge. Dumas et al. (2018) and Szelągowski et al. (2022) highlight that resistance is often encountered when employees are asked to shift from manual processes to automated systems. This resistance can be particularly strong if employees feel their roles are being diminished or that they are losing control over aspects of their work. For SGC, effectively managing this transition will require clear communication, comprehensive training, and demonstrating the benefits of automation to ensure that employees understand how BPMS can improve their work environment. Emphasizing the positive impact of these changes is crucial for securing employee buy-in and ensuring a successful transition.

While the adaption of BPMS is beneficial in many ways, the challenges of integration and employee resistance must be carefully addressed. For SGC, a strategic approach to overcoming these barriers is essential to fully leverage the benefits of BPMS and ensure a smooth transition to automated, streamlined workflows.

Automation Implementation Plan for SGC Coaching Specialist Processes

The objective of this session is to propose a BPMS and RPA automation implementation plan for SGC's coaching specialist processes, enhancing efficiency, reducing manual workload, and improving overall client satisfaction.

Phase	Goal	Activities	Outcome
Assessment and Planning	Identify key processes for automation, understand current pain points, and define success metrics.	Review existing To-Be models and conduct a gap analysis to determine which processes will benefit most from automation	A detailed automation plan outlining target processes, expected outcomes, and resource requirements.
		Engage stakeholders, including coaching specialists, receptionists, and management, to gather input on process improvements and expectations.	
		Define automation goals, such as reducing verification processing time by 30% or improving accuracy in payment processing	
System Selection and Integration	Choose the right BPMS and RPA tools that align with SGC's needs and integrate them with existing systems	Evaluate and select BPMS software that can integrate with SGC's coach database and payment systems	Selected BPMS and RPA tools, integration blueprint, and an implementation timeline.
		Develop an integration strategy for seamlessly connecting BPMS with existing tools for client management and scheduling	

		Identify RPA tools for automating specific tasks like sending notifications, verifying payments, and generating invoice	
Process Design and Modeling	Create and refine process models within the BPMS to ensure smooth automation.	Develop detailed process models for automated workflows, including client onboarding, payment verification, and session verification	Validated process models ready for automation, documented workflows, and stakeholder approval.
		Test models using simulation features in BPMS to ensure they meet performance targets and align with business goals	
		Incorporate feedback from stakeholders to refine models and address any potential issues before deployment.	
Implementation and Testing	Implement automated processes and test their functionality in a controlled environment.	Deploy automated workflows within BPMS for real-time operation, starting with low-complexity tasks such as sending payment reminder	Fully deployed BPMS and RPA solutions, pilot test results, and feedback for adjustments.
		Run pilot tests for each automated process to ensure that they work as intended and meet defined performance criteria.	
		Conduct feedback session from stakeholders	
Training and Change Management	Ensure that staff can effectively use the new BPMS and RPA systems and adapt to the changes.	Provide training sessions for SGC staff, focusing on how to interact with automated workflows and understand the benefits	Trained staff, high adoption rates, and reduced resistance to new systems.
		Develop user guides and troubleshooting manuals for commonly encountered issues.	

		Implement change management strategies to address any resistance and highlight the efficiency gains from automation	
Monitoring and Continuous Improvement	Evaluate the performance of the automated processes and continuously optimize them.	Use BPMS monitoring tools to track key metrics such as time savings, error reduction, and client satisfaction	Optimized workflows, ongoing process improvements, and frequent performance reports.
		Hold regular review meetings with stakeholders to assess the impact of automation and identify areas for further improvement	
		Implement process adjustments based on performance data and feedback to ensure that SGC's automation continues to meet evolving business needs.	
Scaling and Future Integration	Expand automation to additional processes and integrate new technologies.	Identify additional processes that could benefit from automation based on the success of the initial deployment.	Roadmap for future automation initiatives and scalable systems that support long-term growth.
		Plan for scaling the automation as SGC's client base grows, ensuring that the systems can handle increased volumes without a decrease in performance.	
		Explore integrating AI and machine learning capabilities with BPMS for enhanced data analysis and predictive insights	

Conclusion

In conclusion, the implementation of BPMS and RPA at SGC represents a strategic approach to addressing process inefficiencies and enhancing service delivery. By automating tasks such as client registration, payment verification, and assignment confirmations, SGC can significantly reduce manual workload and improve client satisfaction. While challenges like integration complexities and employee resistance must be managed, the long-term benefits of process automation—including scalability, efficiency, and agility—make it a valuable investment for SGC. With careful planning and continuous improvement, SGC can leverage automation to maintain a competitive edge and achieve sustainable growth in the evolving business landscape.

References

Bartlett, L., Kabir, M.A. and Han, J., 2023. A review on business process management system design: the role of virtualization and work design. *IEEE Access*.

Bédard, M., Leshob, A., Benzarti, I., Mili, H., Rab, R. and Hussain, O., 2024. A rule-based method to effectively adopt robotic process automation. *Journal of Software: Evolution and Process*, p.e2709.

Dumas, M., Rosa, L.M., Mendling, J. and Reijers, A.H., 2018. Fundamentals of business process management. Springer-Verlag.

Espina-Romero, L., Gutiérrez Hurtado, H., Ríos Parra, D., Vilchez Pirela, R.A., Talavera-Aguirre, R. and Ochoa-Díaz, A., 2024. Challenges and Opportunities in the Implementation of AI in Manufacturing: A Bibliometric Analysis. Sci, 6(4), p.60.

Fung, H.P., 2014. Criteria, use cases and effects of information technology process automation (ITPA). *Advances in Robotics & Automation*, *3*.

Kasowaki, L. and Burak, A., 2023. *Cybersecurity Essentials for Robotics Process Automation Deployments* (No. 11351). EasyChair.

Munusamy, J., Chelliah, S. and Mun, H.W., 2010. Service quality delivery and its impact on customer satisfaction in the banking sector in Malaysia. *International journal of innovation, management and technology, 1*(4), p.398.

Ouyang, C., Adams, M., Hofstede, A.H.T. and Yu, Y., 2021. Design and Realisation of Scalable Business Process Management Systems for Deployment in the Cloud. *ACM Transactions on Management Information Systems (TMIS), 12*(4), pp.1-26.

Plattfaut, R. and Borghoff, V., 2022. Robotic process automation: a literature-based research agenda. *Journal of Information Systems, 36*(2), pp.173-191.

Syed, R., Suriadi, S., Adams, M., Bandara, W., Leemans, S.J., Ouyang, C., Ter Hofstede, A.H., Van De Weerd, I., Wynn, M.T. and Reijers, H.A., 2020. Robotic process automation: contemporary themes and challenges. *Computers in Industry, 115*, p.103162.

Szelągowski, M., Berniak-Woźny, J., Lupeikiene, A. and Senkus, P., 2023. PAVING THE WAY FOR TOMORROW: THE EVOLUTION OF ERP AND BPMS SYSTEMS. Scientific Papers of Silesian University

of Technology. Organization & Management/Zeszyty Naukowe Politechniki Slaskiej. Seria Organizacji i Zarzadzanie, (185).
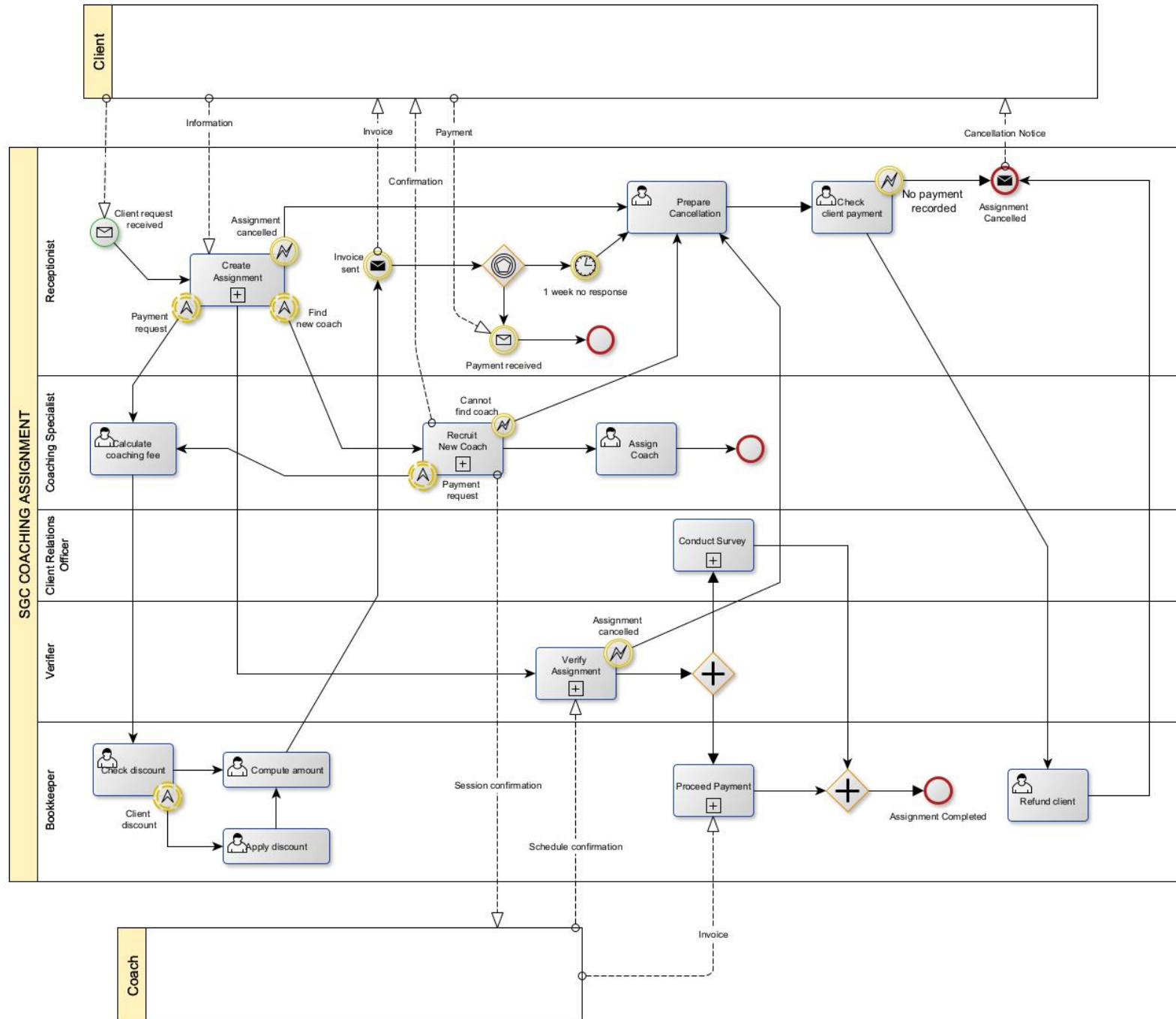
Szelągowski, M., Lupeikiene, A. and Berniak-Woźny, J., 2022. Drivers and evolution paths of BPMS: state-of-the-art and future research directions. *Informatica*, *33*(2), pp.399-420.

Trasorras, R., Weinstein, A. and Abratt, R., 2009. Value, satisfaction, loyalty and retention in professional services. *Marketing Intelligence & Planning, 27*(5), pp.615-632.

Appendix

**SGC TO-BE MODEL**

1.   Main Process

Clarification: The main process outlines the implementation of the prepayment solution. Before creating a new assignment, the coach specialist calculates the coaching fee and sends the details to the bookkeeper, who then computes the final amount. The receptionist verifies that the client has made the payment before proceeding to create the assignment.

If a client decides to cancel the assignment, the receptionist must first check whether any payment has been made. If a payment has been received, the bookkeeper will manage the refund process before the assignment is officially cancelled.

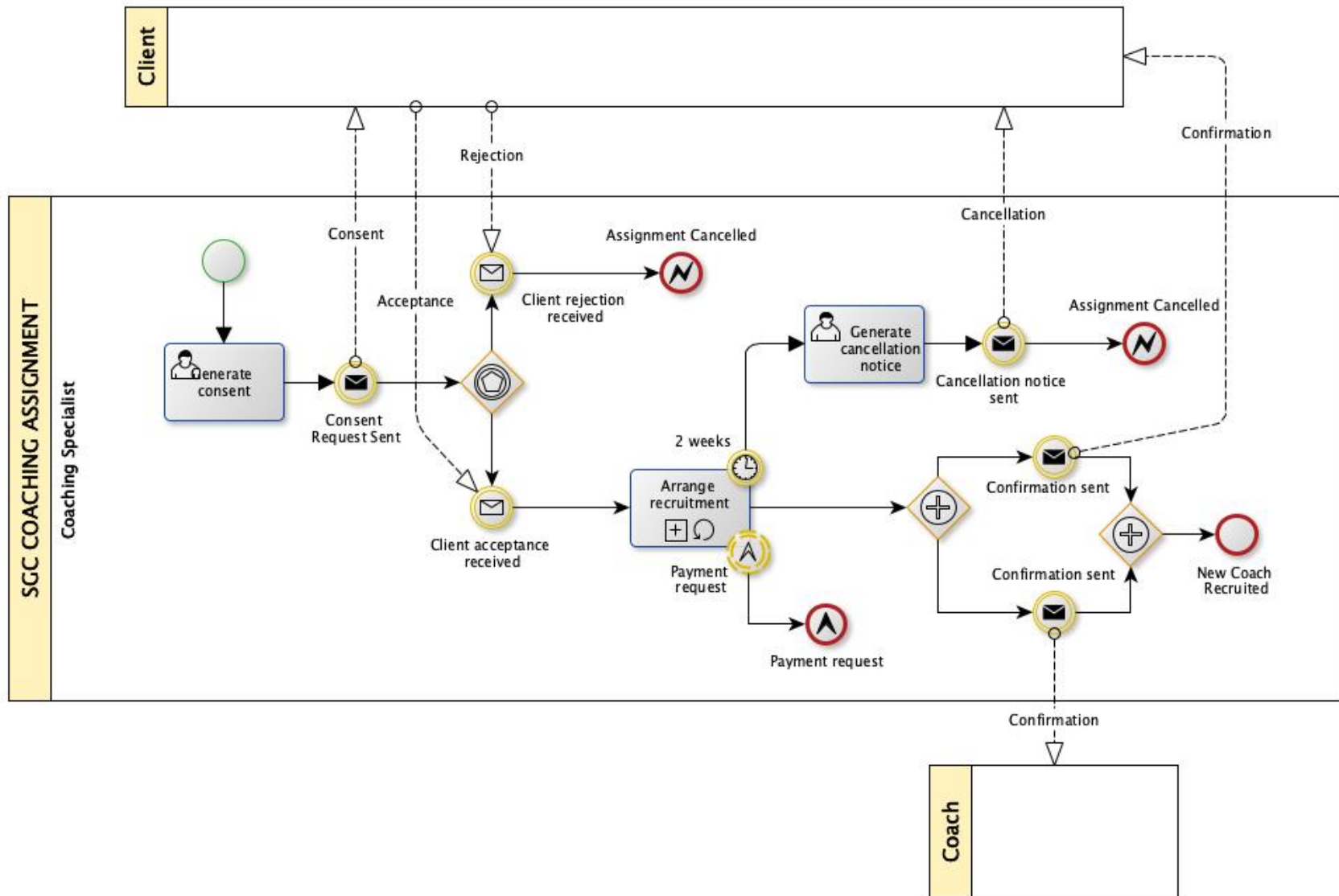## 2.   Create Assignment Subprocess
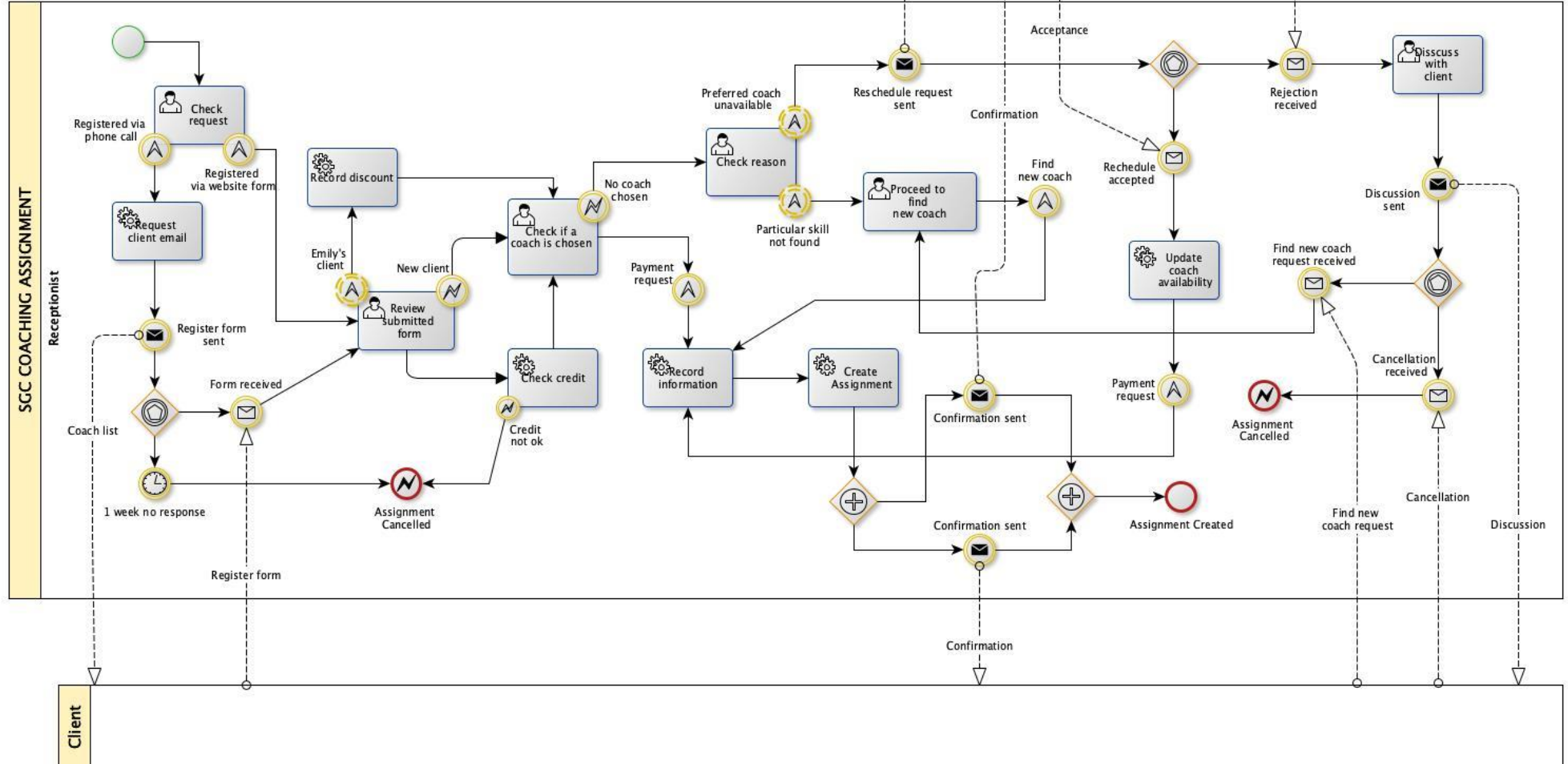
Clarification: With the implementation of a web registration form, the "Create Assignment" subprocess for SGC can be greatly streamlined. Initially, the receptionist will determine whether a client has registered through the web form or by phone. If the client calls, the receptionist will request their email address and send them a link to the registration form on the company's website. This approach ensures that all coaching sessions begin with a standardized registration form, allowing clients to select a suitable coach directly. This uniform method minimizes delays in scheduling and assigning coaches, creating a more efficient process. Following the client's submission of the form, the receptionist must confirm the accuracy of the submitted form.

A key step in the process is "**Check if a coach is chosen**" when the client submits the form. This determines if the client has already chosen a coach, allowing the process to proceed smoothly. If no coach is selected, the receptionist checks reasons like skill mismatches or scheduling unavailability. The procedure then escalates to the proper flow, whether it's managing rescheduling, updating availability, or finding a new coach. Since tasks like managing rescheduling and updating availability are straightforward and involve sending communication messages rather than requiring domain expertise, we assigned these responsibilities to the receptionist. This approach reduces the workload of the coach specialist, who will focus solely on cases that involve **finding a new coach**.

To guarantee commitment and avoid delays, the model always requires payment before the assignment can be successfully created, which reflects our prepayment solution.
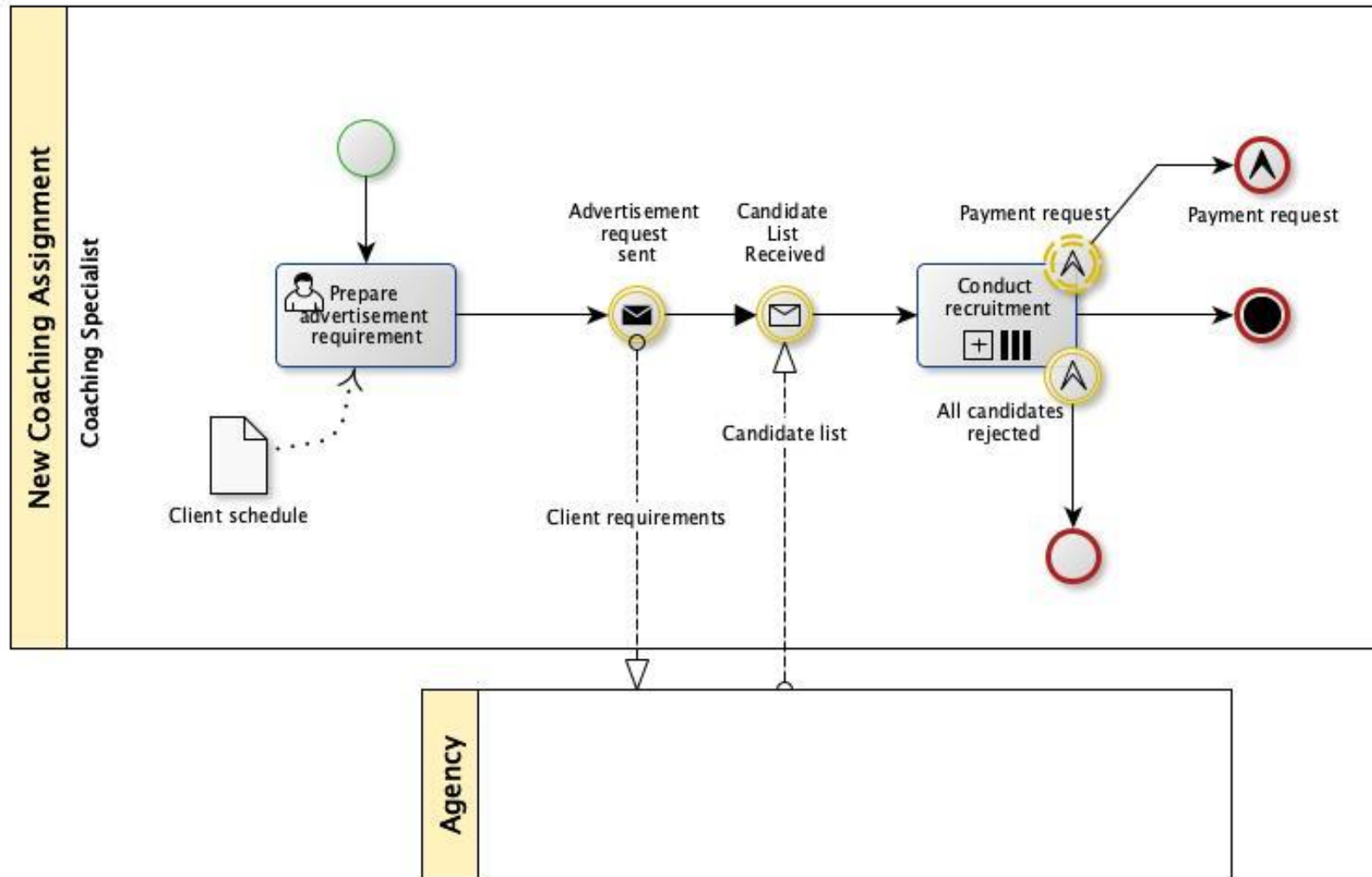
To guarantee commitment and avoid delays, the model always requires payment before the assignment can be successfully created, which reflects our prepayment solution.

3.   Recruit new Coach Subprocess

Client

Rejection

Consent

Acceptance

Cancellation

Confirmation

SGC COACHING ASSIGNMENT

Coaching Specialist

Generate consent

Consent Request Sent

Client rejection received

Assignment Cancelled

Generate cancellation notice

Cancellation notice sent

Assignment Cancelled

Client acceptance received

Arrange recruitment

2 weeks

Payment request

Payment request

Confirmation sent

Confirmation sent

New Coach Recruited

Coach

Confirmation

4.   Arrange Recruitment Subprocess

New Coaching Assignment

Coaching Specialist

Prepare advertisement requirement

Client schedule

Advertisement request sent

Client requirements

Candidate List Received

Candidate list

Conduct recruitment

Payment request

Payment request

All candidates rejected

Agency

Clarification: When preparing the advertisement request ready to be sent to the advertising agency, the coach specialist must prepare the client's schedule (which can be requested in the consent asking for hiring a new coach) and send it to the agency as a hiring requirement. This makes sure SGC only looks for candidates that have their schedule match with clients' schedule, which aligns well with our proposed solution addressing **Misaligned Hiring and Availability between Coach and Client** issue.

5. Conduct Recruitment Subprocess
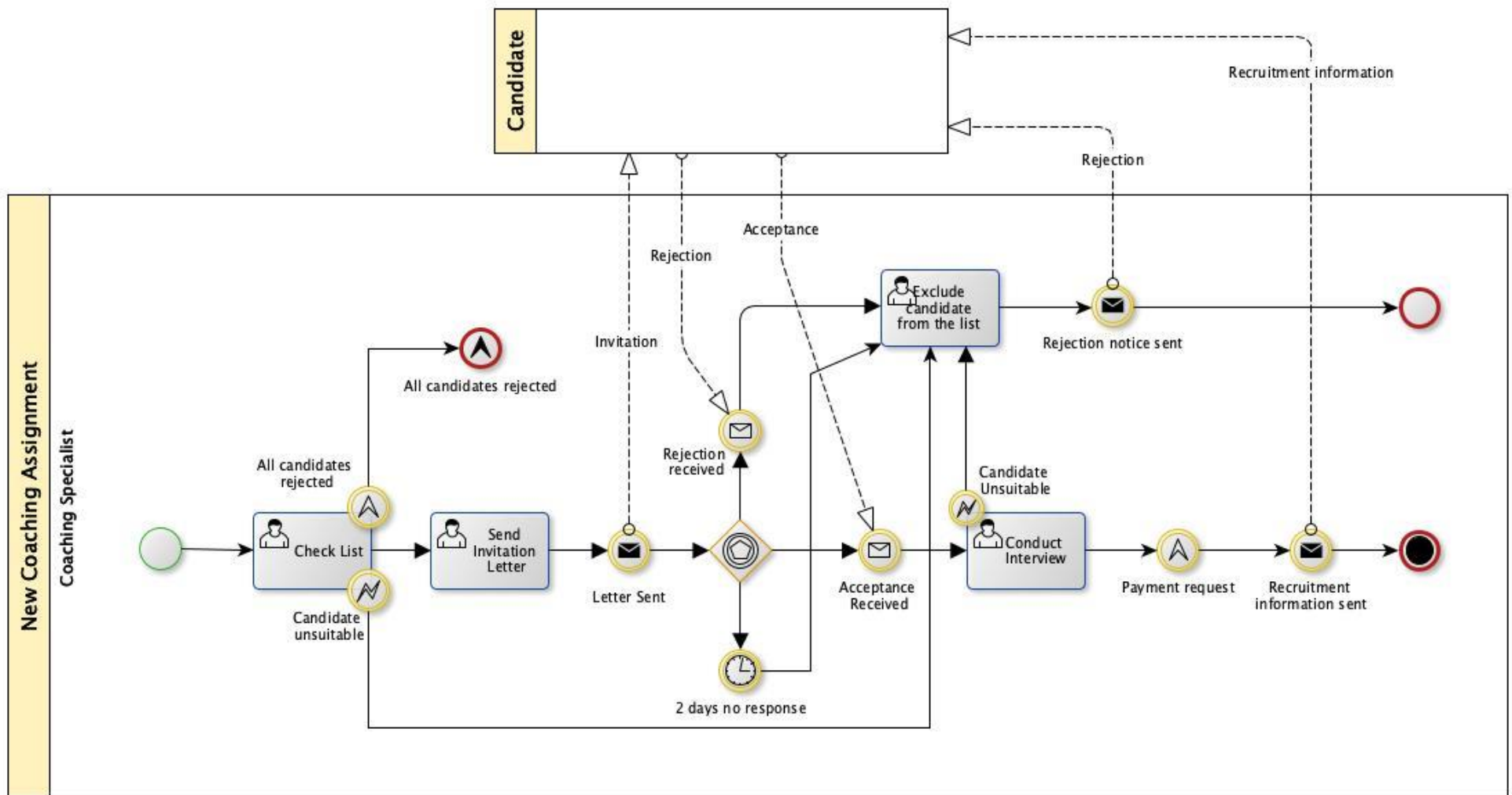
Clarification: Following the interview, the customer is asked to pay in the "Conduct Recruitment" to-be subprocess before the coach is officially hired. This step is represented in the model by the "Payment Request" escalation event, which occurs after the "Conduct Interview" step. The coach is not officially hired until the money has been properly completed and the recruitment documents have been provided. By ensuring that all required payments are made before proceeding, this flow strengthens the prepayment solution and protects against any problems related to unpaid services.
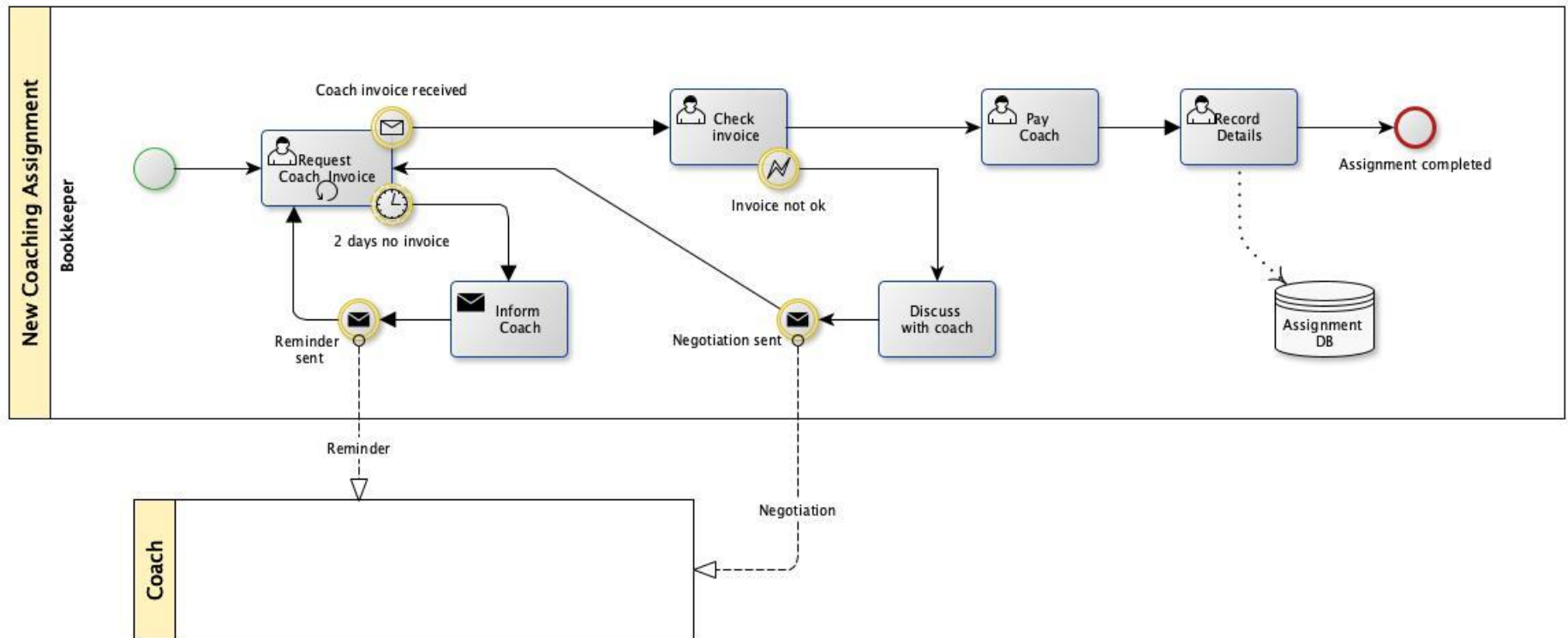
6. Verify Assignment Subprocess
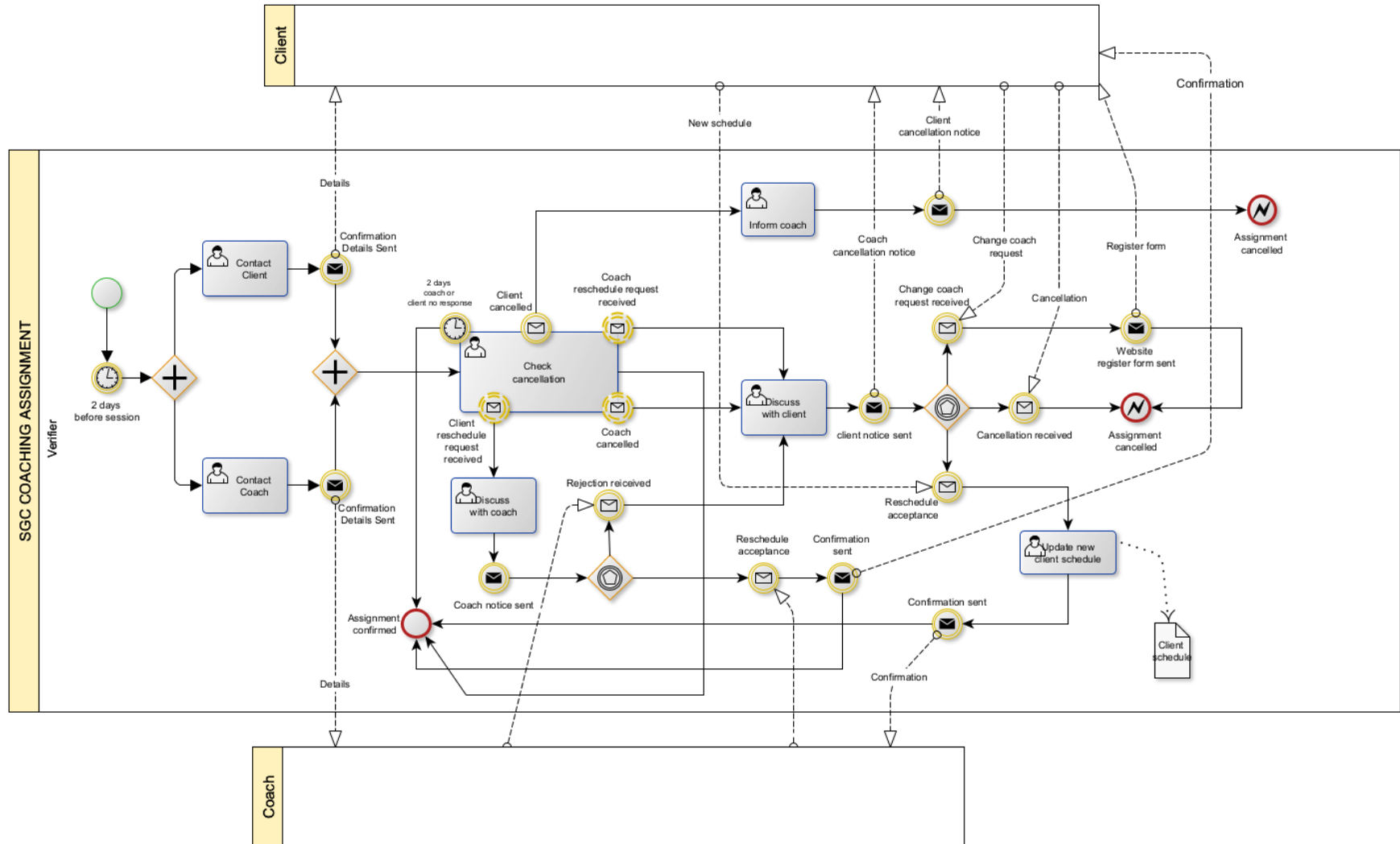
Clarification: In the Verification To-be subprocess, all tasks remain unchanged except for the "**Change Coach request received**" message event. After discussions with clients—whether the coach fails to confirm the assignment or requests a reschedule—if the client decides to switch to a new coach, the verifier will send them a link to the website registration form. The client will then complete the form, select a new coach, and submit it, eventually creating a new assignment. Therefore, the verifier will cancel the current assignment (where the client cannot find a coach) and the client will choose a new coach and submit a new form.

7. Proceed Payment Subprocess

8. Conduct Survey Subprocess