System Analysis of the "GCVP Requests" Process

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Introduction

In the modern banking sector, the automation of business processes plays a key role in increasing efficiency and reducing errors. The process of "GCVP Requests" is an essential stage in the interaction between the bank and the State Center for Pension Payments (GCVP). The objective of this process is to migrate the existing workflow from the Lotus database to a BPM (Business Process Management) system, which will simplify and accelerate request processing while integrating the process with other systems such as the CEA (Central Electronic Archive) and the GCVP microservice.

Automating the process will allow:

- Reduction of request processing time.
- Minimization of errors associated with manual data entry.
- Ensuring transparency and control at all stages of the process.
- Simplified integration with other banking systems.

This document presents a system analysis of the process, including descriptions of its stages, roles, and integrations.

Notations and Abbreviations

No	Definition	Abbreviation	Description
1	BPM System	BPM	Bank's information system designed for customer service processes.
2	Central Electronic Archive	CEA	Central repository for electronic documents.
3	Bank Employee	Initiator	Loan Support Manager / Head of URP / Director of CBO / Head of UBP / Employee of NVPZ FB.
4	GCVP Microservice	GCVP	A microservice providing reports from the State Center for Pension Payments (JSC "Government for Citizens").
5	Initiator's Supervisor	Supervisor	Direct manager of the Bank Employee (Initiator).
6	Core Banking System "Colvir"	Colvir	Banking software.
7	Cache Storage	Cache	Storage where previously requested GCVP reports are kept.

1. General Information about the Process

The process is called "GCVP Requests", and its goal is to migrate the workflow from the Lotus database to a BPM system. The process includes integration with the following systems:

- BPM.
- CEA (Central Electronic Archive),
- GCVP microservice (State Center for Pension Payments).

2. Main Process Stages

The process consists of several stages, which can be visualized in Camunda Modeler. Below is the description:

1. Process Start

- BPMN Element: Start Event.
- **Description**: The starting point of the process.
- Appearance: A circle with a thin outline.

2. Application Submission

- BPMN Element: User Task.
- Task Name: "Application Submission".
- **Description**: The initiator (bank employee) creates an application in the BPM system, filling in the following fields:
 - Client's IIN.
 - Reason for request (selected from a list: lending, monitoring, deferment, etc.).
 - Scans and attaches the client's consent.
 - Clicks the "Confirm" button.
- Appearance: A rounded rectangle with "Application Submission" inside.

3. Checking Report Availability in CACHE

- BPMN Element: Exclusive Gateway.
- Gateway Name: "Checking Report Availability in CACHE".
- **Description**: The system checks whether a previously requested report exists in the CACHE and if its validity period has not expired (within 7 calendar days).
 - If available, the process proceeds to providing the report from CACHE.
 - If not, the process proceeds to requesting the report from GCVP.
- Appearance: A diamond with two outgoing arrows.

4. Providing Report from CACHE

- BPMN Element: Service Task.
- Task Name: "Providing Report from CACHE".
- Description: If the report exists in CACHE, the system automatically provides it to the initiator.
- Appearance: A rounded rectangle with "Providing Report from CACHE" inside.

5. Requesting Report from GCVP

- BPMN Element: Service Task.
- Task Name: "Requesting Report from GCVP".
- **Description**: If the report is not in CACHE, the system sends a request to the GCVP microservice to obtain the report.
- Appearance: A rounded rectangle with "Requesting Report from GCVP" inside.

6. Checking Client Consent

- BPMN Element: User Task.
- Task Name: "Checking Client Consent".
- **Description**: The initiator's supervisor verifies the client's consent. If it is valid, the process continues. If not, the application is returned for revision.
- Appearance: A rounded rectangle with "Checking Client Consent" inside.

7. Generating PDF Report

- BPMN Element: Service Task.
- Task Name: "Generating PDF Report".
- Description: If client consent is valid, the system generates a PDF report.
- Appearance: A rounded rectangle with "Generating PDF Report" inside.

8. Application Revision

- BPMN Element: User Task.
- Task Name: "Application Revision".
- Description: If client consent is incorrect or missing, the application is returned for correction.
- Appearance: A rounded rectangle with "Application Revision" inside.

9. Process Completion

- BPMN Element: End Event.
- **Description**: The process ends after the report is successfully generated or the application is revised.
- Appearance: A circle with a thick outline.

Conclusion

Automating the "GCVP Requests" process using a BPM system and integrating it with other banking systems significantly enhances request processing efficiency. Migrating from the Lotus database to a modern business process management system ensures:

- Reduced request processing time.
- Fewer manual data entry errors.
- Improved control and transparency.
- Easier integration with other banking systems.

This process represents a crucial step in the digitalization of banking operations, improving customer service quality, and ensuring compliance with modern standards and requirements.