

Syne-Call Matrix Management Framework– White Paper

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Introduction

Now a days, many insurance-based Business Process Management (BPM) applications are running successfully in IT industries; however, none of them are smart enough to identify risk for any particular enrollment/policy-related issued. Similarly, these applications are lacking in having rich and user friendly UI to generate reporting of CSR activities like Claims Processing, Outbound Policy sales, escalation management, etc. and calls. In order to overcome these problems, we have come up with an Idea of having a framework that serves both the purpose and enrich the insurance-based applications in just a click. Keeping this as major problem in many organizations, we had developed Syne-Call Matrix Management Framework (Syne-CMM). Syne-CMM application is an integration of SCALA and PEGA that enriches the application reporting look and feel. Also, Syne-CMM has artificial intelligence to determine the risk at run time when any insurance application tries to sell policy.

Why is Syne-CMM Needed?

Syne-CMM is smart enough to determine the risk at run time. Risk management algorithm is written in such a way that any BPM application built on any technology can start using it just after they plug-in Syne-CMM in their system. All the existing applications check this risk based on their logic that is implemented and is not smart enough to determine the risk on run time. However, Syne-CMM makes the application to determine the risk capabilities at run time at 0 maintenance cost. This saves lots of time and effort in building and changing the technique of risk capabilities. The added flavor of Syne-CMM also maintains a Call Matrix about all the CSR activities and has a much enriched UI and reporting technique for better user understanding. This tool proves a significant role in monitoring the entire Insurance application and keeps the track of each and every call.

- **Problem 1: Risk Determining Capabilities at run time based on Real Data of a particular organization**

All the organizations are working on a concept of already build logics to determine risk, what if the logic needs to be changed in future. It requires a lot of efforts in development and maintenance that causes to bear increased costs for the organizations.

Solution:

Syne-CMM has implemented an algorithm that determines risk at run time based on the data it is tracking for all CSR activities. For Example, for any particular region or assets, there are more number of claims; it increases the risk of insuring for those scenarios. This graph changes on a regular basis and from industry to industry. The already implemented systems are not having enough intelligence to determine this issue on fly. In Syne-CMM, we keep track of all the CSR activities and claims in a single database <SCMM DB> that helps SCMM to be smart enough to determine the risk. Once the call is started to initiate the insurance for any customer, Syne-CMM keeps an eye on each event and turns the risk flag on where ever applicable.

- **Problem 2: Regular track of each and every CSR activity**

Now a days, insurance-based applications are accessed through Web and various calls that comes from across the region. Industries have a large database to maintain all these records. This results in huge maintenance cost.

Solution:

Once the Syne-CMM framework is installed/Plugged in into the insurance application, industries need not to worry about keeping these records. Maintenance of all CSR Activities including Call, Escalations without any extra effort and at 0 Cost is done by Syne-CMM. It stores all records in a single database. This helps organizations to maintain and keep track of all CSR events without affecting the performance of application.

- **Problem 3: Facing UI Limitation Problems**

Prior to Syne-CMM, we came to know that all the insurance industries are been designed in such a way that they are facing lot of problems in their reporting events. The major problems were related to user interface.

Solution:

To overcome this problem, Syne-CMM is built and it is based on SCALA and PEGA PRPC integrations. This unique combination enriches the reporting portal of Syne-CMM that is very helpful to all the organizations.

- **Problem 4: Smart Reporting Technique**

The other thing found missing in current insurance industry applications is to build an advance reporting technique. Normally, a group of people see these reports and consolidate and send them to the higher authorities. Due to human intervention, the entire process is more prone to bugs.

Solution:

Syne-CMM is having a reporting portal that is much enriched on UI level and in backend process. Syne-CMM is built in such a way that whenever there is any higher risk such as Number of claims in particular area is increased, Number of claims based on certain assets increased, it determines automatically and sends an alert to all the higher authority and sends a complete report to them mentioning about the problem. This helps industries in determining the restriction for issuing policy for any place or assets on run time, which helps to save time, money, and efforts.

Business Opportunity

Syne-CMM has emerged as a key buying decision in the insurance domain-based applications. Insurers who can identify risk on fly and who have better monitoring techniques can establish good relationship and rapport with their customers. Syne-CMM helps to streamline and automate processes of reviewing all the CSR activities. It also helps for in identifying these risks for new agreement purchases and integrates with any Insurance application without affecting its internal architecture, which helps in faster resolution of policy and claims filed by any customer.

This reporting solution can be merged into different aspects of an insurance applications or products.

- Creates Normal and Smart Reporting
- User friendly UI, which any person who is having business knowledge can perform.
- Smart reporting technique helps to understand the problems and risks on run time.
- Have Artificial intelligence to determine and indicate risk while issuing new insurance
- Integration of SCALA and PEGA increases the richness of UI

Challenges Faced by Syne-CMM

Following challenges were faced while developing/designing Syne-CMM:

- **Integration of PEGA PRPC services With SCALA:** Although PEGA PRPC is very rich in integration; we faced a lot of problems while adding SCALA UI with PEGA PRPC services. In order to resolve all the exceptions and issues, we created a Service API and exposed and integrated it into SCALA UI.
- **Lots of real time problem gathering was required:** In order to make this application as smart risk indicator on run time, we discussed with almost all our clients and gathered the problems which they were facing in their respective applications. This was not an easy task and was time consuming process. We almost covered all the requirements/problems faced by our client, by developing a single Syne-CMM.
- **Integrating all CSR activities in a single database:** Gathering all the data related to CSR activities of any application across the region were quite challenging, when we say that this application needs no extra effort to integrate with the other systems. We have designed the entire application in such a way that it becomes possible to integrate any system.

Topic of this paper and its scope

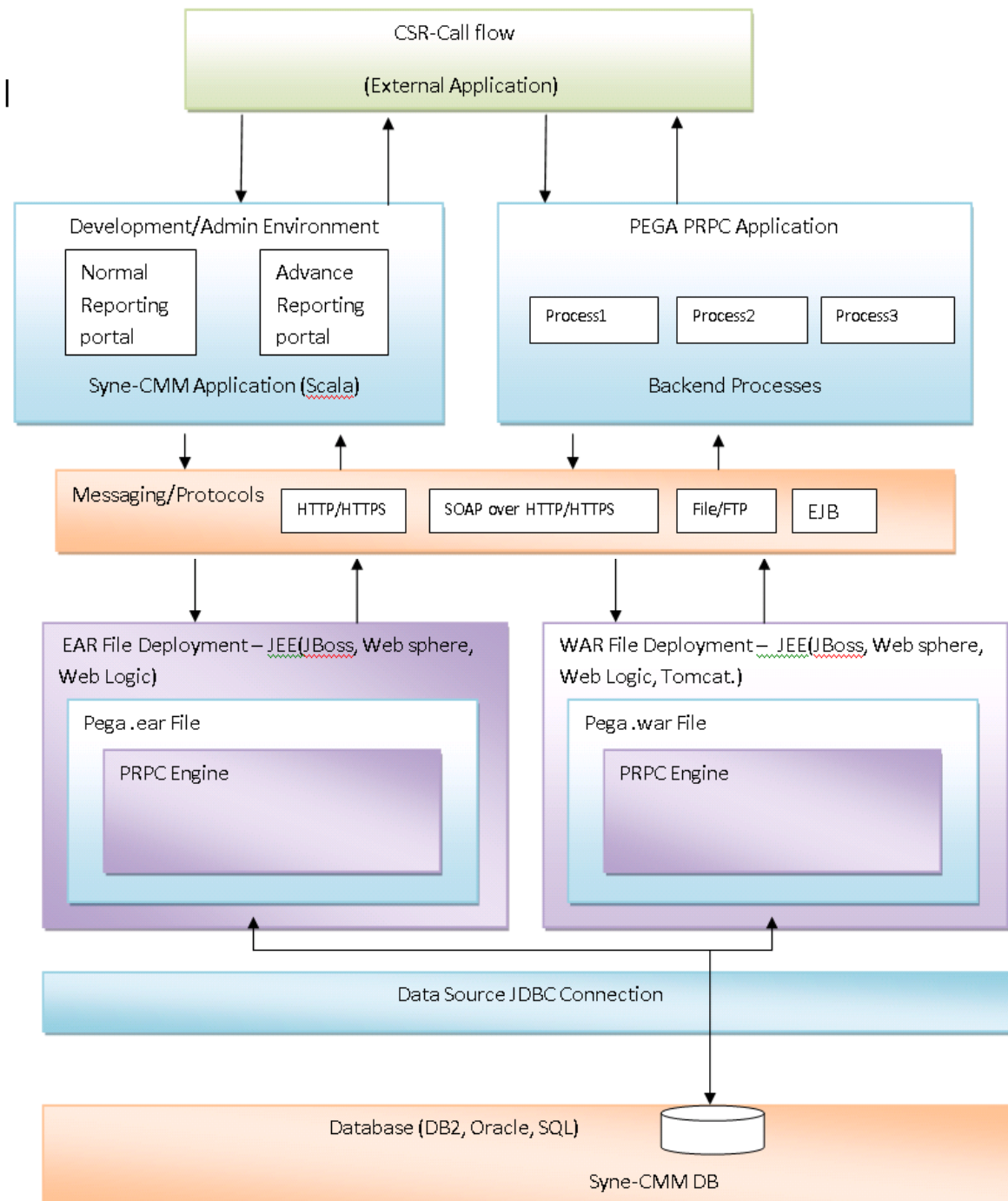
The scope of this paper covers the following:

- Overview of Syne-CMM
- Advantages of Syne-CMM
- Challenges faced while developing this framework
- Business impacts

Solution Offering by Synechron

Synechron has designed/developed the Syne-CMM that is based on the insurance domain. This framework addresses the key challenges enumerated above.

- Syne-CMM Workflow – High-Level Architecture**



About Syne-CMM

Syne-CMM is single solution developed for multiple problems described above. Syne-CMM is designed in such a way that it includes the solution for limitations we have facing related to UI and BPM tools for reporting. Syne-CMM application is an integration of SCALA and PRPC that enriches the application's reporting look and feel. Also, Syne-CMM has artificial intelligence to determine the risk at run time when any insurance application tries to create or issue the policy.

There are two ways to access to plug in Syne-CMM to any insurance-based application:

1. In CSR Call Flow of the application (insurance-based application that is using Syne-CMM):

Whenever any new insurance is issued during CSR calls, the flow makes a call to Syne-CMM Backend Services to identify the risk involved while issuing the new policy. The main task of Syne-CMM services are to process the data received from CSR flow and run an algorithm to determine the risk level of the policy, Syne-CMM use to pass Risk indicator flag as Low, High, and Critical. Based on this result, CSR flow either raises a hold or can directly deny to issue the particular policy.

2. In Reporting UI:

Once the Syne-CMM is installed in insurance applications, we provide a separate reporting portal to the users. This portal includes normal and advanced reporting technique. Normal reporting module helps to support the existing functionality, which the existing BPM world has. Whereas Advance Reporting technique provides users to build their own report format on run time, apart from enriching UI in Syne-CMM. Apart from that, we have added a flavor to Syne-CMM, i.e., it also generates reports about the Risk-related activities. For example, if we are generating a Claims report for Washington DC, the report generated by Syne-CMM will provide you all the risk involved areas such as assets, places, and claims probability. This is very useful as the entire process of determining risk is automated and just by clicking a button, insurance companies can generate all the details.

The entire architecture is divided into 4 modules Normal Reporting Module, Advance Reporting Module, Risk Identifier Module, and Backend Services API module. The detailed description for each module is provided below:

• Module 1: Normal Reporting Module

As Syne-CMM will be installed in already running insurance application, it is very much important that it should not impact the existing functionality. In order to resolve this problem, we have built the similar normal reporting technique that is supported by current the BPM applications. This module contains design of a portal which has all features involved for reporting and is pretty much similar to what we have in current insurance applications.

This module is developed that do impact on the existing system. For example, Syne-CMM can be installed in the running applications. It would work like a plug-in to the

existing system. Since the existing system always carries a few part of reporting implemented based on their BPM UI. If Syne-CMM would not have this feature, it would impact to those systems in which Syne-CMM would be installed. The main task of this module is to support the existing functionality of the system.

• **Module 2: Advance Reporting Module**

Advance Reporting Technique of Syne-CMM includes the integration of SCALA programming language and PEGA PRPC Services. In this module, we have designed a user reporting portal that will be integrated to the insurance-based applications. This portal provides a very rich and user friendly UI. Using Syne-CMM Advance reporting module, users can customize the report format on run time and view it in any reporting format such as, list or summary or both. We have added a flavor to this Advance Report, i.e., to indicate the risks involved in a particular report.

For example: Let's say, we want to generate a report on Sterling VA city and want to see all the customers who have enrolled in our insurance policy. The Advance reporting portal will allow you to define your own parameters to be included, such as, if we want First Name, Last Name, and Device Enrolled, Premium Paid, etc.

Also, it provides all the details based on previous claims for Sterling VA made to the system. This helps us to determine the future risk and analyze on those factors that are responsible for the organization's profit. This also helps to establish the relationship with customers as insurance company gives clarity with their offers.

Normally, this entire process is done manually and a lot of efforts and cost is required to identify future risks; however, using Syne-CMM, it is just a matter of a click.

• **Module 3: Risk Identifier Module**

The Risk Identifier module is a unique feature provided by Syne-CMM for any insurance-based applications. Usually in insurance companies, the biggest challenge is to identify risk for any particular place, asset, or insurance offers. These risks are determined using lots of analysis and manual effort that needs lot of time as well. Also with time, these risk factors keep changing. In order to overcome this problem, we have implemented Risk identifier algorithm that determines the risk-related factors and intimates the organization's management immediately through auto-generated emails. Advantage of using this module is it reduces the effort as the entire process is automated and it can be calculated on run time.

This module includes the following task:

1. In CSR-Call Flow of the application, whenever any call comes related to claim or new policy, CSR-Call Flow will access Syne-CMM backend service UI and send all the details to Syne-CMM system.

2. Syne-CMM Backend services are responsible to store the records in Syne-CMM Database.
3. There is a backend process that runs twice a day to execute the Risk Identifier Algorithm.
4. If any risk found, a detailed report on the risk is sent over an email to all the higher management who wants to keep track on it. Also, Syne-CMM do have a record of this newly added risk in Syne-CMM Database.

• **Module 4: Backend Services Module**

In this module, we have designed and implemented all the services that will be exposed to SCALA UI and CSR-Call flow of the existing system where Syne-CMM will be integrated. The purpose of these backend services are as follows:

1. Whenever CSR-Call flow runs for any new policy sale, the call flow sends a request to Syne-CMM to identify the risk involved on that particular policy. Backend services are created to process the request. The task of the backend services is to take the requests.
2. Check if any new risk or all the risks available in Syne-CMM Database matches to the existing list of risks identified. If matches, we send the risk details to CSR-Call flow in response.
3. Whenever CSR-Call flow executes for any new policy or claims, it sends the entire data to Syne-CMM. We have created backend services to store the requested data in Syne-CMM Database.
4. Syne-CMM has also developed the Backend services to support the Communication related stuffs such as sending alerts over emails and SMS, or triggering reports in Emails, etc.
5. Future Scopes such as to integrate with non-BPM applications are to be designed as a part of Backend Services Module.

Case Study

• **Context**

Now a day, many insurance-based BPM application is running successfully in industries; however, none of them are smart enough to identify risk for any particular Enrollment/policy issues. Similarly, these applications are lacking in having rich and User friendly UI for reporting their CSR Activities and calls. In order to overcome this problem, we have come up with an Idea of having a framework that serves both the purpose and enrich the insurance-based applications in just a click. Seeing this as major problem faced in many organizations, we had developed Syne-Call Matrix Management Framework (Syne-CMM).

• **Objectives**

Syne-CMM primary objective is to make the insurance application smarter and smarter at 0 maintenance cost. Syne-CMM rich UI and advanced risk identifier feature that makes the

industries to reduce the loss and have better understanding of their customers and help building trust with each other.

• **Solution**

Syne-CMM is smart enough to determine the risk at run time. Risk management algorithm is written in such a way that any BPM application built on any technology can start using it just after they plug in Syne-CMM in their system. All the existing applications can check risk based on their logic that is implemented and is not smart enough to determine the risk on fly. However, Syne-CMM helps in determining the risk capabilities at run time at 0 maintenance cost. This saves a lot of time, cost, and efforts in building and changing the technique of risk capabilities. The added flavor of Syne-CMM also maintains a Call Matrix about all the CSR activities that has a much enriched UI and reporting technique for better user understanding. This tool proves a significant role in monitoring the entire Insurance application and keeps track of each and every call.

• **Salient Features**

- Trigger Automated Reporting if any risk found and provides complete detail about the risk
- Having rich and better UI, Using SCALA for reporting UI, it is 10 times better what the industries are having currently
- Amazing Risk identifying Capacity based on the real time data of the industry
- Integrated all CSR activities across the region of any industries in a single DB
- No maintenance cost required
- 0 efforts required to install or plug in on any insurance applications

• **Conclusion**

Syne-CMM is a tool built to overcome the problems of Insurance industries and made them smart enough to take the decision on any risk identified on real time. The integration of SCALA and PEGA makes it very efficient in terms of performance and leads Syne-CMM to run on 0 maintenance cost and effort.

About Synechron

Synechron, Inc. is a wholly owned subsidiary of Synechron Holdings, Ins., a British Virgin Islands International Business Company. Synechron, Inc. US was founded in 2005 and is headquartered in Piscataway, New Jersey. Synechron is one of the fastest growing IT companies, specializes in Insurance, Capital Markets, Mortgage Banking, Energy and Commodities and Digital Media & Technology space. The company offers Information Technology Strategy & Architecture, Application Development & Maintenance, Mobile Application Development, Business Intelligence & Data Warehousing, Cloud Computing, QA Service Offerings, Business Process Management (BPM), Remote Infrastructure Management, and Business Process Outsourcing Services. It has significant presence in the US, Canada, UK, the Netherlands, Ireland, UAE, Singapore, Hong Kong, Japan, and state-of-the-art Development Centers based in Pune, India. Synechron currently employs approximately 5000+ professionals globally.

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