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| **India Manager Letter**  Vishal Bhardwaj, Assistant Manager – Software  March 2017 |
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**Version**

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| **Date** | **Version** | **Author** | **Description** |
| Feb. 14, 2017 | 1.0 | Vishal Bhardwaj | Initial Draft |
| Feb. 16, 2017 | 1.1 | Asma Doni | Reviewed and completed |
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**Reviewed By**

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| **Date** | **Name** |
| Month DD, YYYY | Swarup Tamhane |

# India Manager Letter

I have managerial responsibilities over Mr. Vishal Bhardwaj in India from February 2015 until present, and therefore, I have personal knowledge of the following facts.

Mr. Vishal Bhardwaj joined Synechron in India in August 2012. Mr. Vishal Bhardwaj is well-qualified to perform the duties proposed by Synechron Inc., by virtue of spending over one year applying his advanced knowledge of Synechron’s unique, complex SyneMobile tool to our project work. He is currently working as Assistant Manager – Software involving an advanced level of specialized knowledge.

Specifically, Mr. Vishal Bhardwaj applied his specialized knowledge in:

* **SyneMobile -** from February 2015 - Till date

**Mr. Vishal Bhardwaj acquired his advanced level of specialized knowledge of our SyneMobile tool from February 2015 to February 2016 in India.**

* **His Synechron Supervisor**: Mr. Rajul Mathur, Associate Director - Software

Under his supervisor’s guidance, Mr. Vishal Bhardwaj intensively designed major foundations of our unique SyneMobile tool and subsequently applied it to projects outside the United States as Assistant Manager - Software. This set of duties can be broken down as follows:

**Modules designed for SyneMobile Tool:**

1. **Data Backup**: Vishal Bhardwaj designed this module as an automatic and real time cloud data backup solution. To achieve this, he has written a complex algorithm which ensures that as soon as new images or contacts are added to the device, a system level event is triggered and the files/contacts are uploaded to the remote server on a background thread. He has devised the algorithm in such a manner which makes sure that before the actual upload starts all the files' metadata is gathered and an exchange happens between the server and the device to check if similar files are already backed up (saved or deleted). Along with it, he has also managed the user configurable settings, backup frequency, network and OS level restrictions which makes the logic more complex before uploading the files to the cloud server. ***(20% of work time)***
2. **Device Protection & Security**: Technical design and implementation of this module is done by Vishal Bhardwaj. He designed algorithm in this module to track the malicious files copied to the device along with the capability to detect side loaded apps. As the application runs, a service is started which scans the complete file storage and look at signature (binary makeup) of each file for match or partial match against a database of known viruses and trojans. If a match is found, user is notified and he can choose to delete the file or ignore it. Integration of custom signed certificate chain is also implemented to prevent man-in-middle attacks, so when the application is launched, it first checks the validity of the SSL handshake between the server and progress only after successful authentication. A service is also implemented as a background thread to detect if any phishing website is being accessed by the user on the device browser. It matches the URL entered against a list of known threats and warns the user by showing proper message on the UI. ***(10% of work time)***
3. **Device Recovery:** Vishal Bhardwaj has played very high responsible job to design and implement this module which has a vital role of locating and managing the mobile device in case of theft or misplace. He has developed this module on the basis of push notifications and the functionality is a successful implementation based on an effective communication between mobile device, backend and GCM (Google Cloud Messaging) server. He has used the APIs provided by the SDK to write components which will keep listening to the GCM server for any incoming messages and as soon as a notification is received on the device, an API call is triggered to the backend server to fetch the next course of action and on the basis of it perform necessary operations. Depending on the actions(lock/sound/wipe), necessary classes and methods are invoked to sound an alarm on the device, or to lock it, or to wipe the data. For locate action, GPS related classes are used and location services are enabled to collect the device's current location coordinates and sent across to the backend via API calls. ***(10% of work time)***
4. **Device Health Monitoring:** This module is designed by Vishal Bhardwaj as a device monitoring system which enables user to keep track of applications and other services slowing down the performance of the device. The user is provided with the options to perform speed, storage and battery scan as a part of user interface and once any of these actions is performed, a service is executed and an algorithm kicks in to collect information for the installed apps. For speed, the algorithm detects number of processes running on the device and consuming a lot of memory and in the process slowing it down. Similarly, records are generated for applications consuming large storage space and absorbing lot of battery. Once this information is available, user is notified with a list of applications hampering the device performance. ***(10% of work time)***
5. **Telemetry and Data Analysis**: This module is implemented by Vishal Bhardwaj as a one stop solution for effective data analysis. The functionality is written in such a way that a service component keeps on running on the background to gather user data and a job is scheduled to transfer it to the remote server after every specific interval of time. User’s device settings and application configuration (like report size, number and transmit frequency) has also been considered for the working of the module. On the backend, depending upon the criticality (i.e. low memory storage, app crashes, etc.) of the input data and business rules, user insights i.e. standard HTML templates are generated and stored on the server and a notification is sent to the device along with its content URL. On the device, as soon as the message is received, the URL is fetched from the notification response and the report is displayed on the web view. ***(20% of work time)***
6. **Advanced Technical Support with Live Chat:** After analyzing various options and putting lot of thought process behind this module, it was designed and implemented by Vishal Bhardwaj to provide a customer centric experience and a real time problem solving mechanism to the end users. As the application runs, a service call is made to initiate a request to the server for authentication with a unique id and after successful authentication, same id is used in order to initiate a request for access on the remote channel. The remote API channel is designed in such a way that it is able to transfer device screens to the tech agents, maintaining a seamless user experience. If agents are not available, callback interfaces are also implemented which communicate the reason for agent’s unavailability to the users and proper error messages are displayed to the user. For the chat feature, push notification is implemented, and all the necessary components like GCM service and broadcast receiver are integrated beforehand so as soon a message is received, the response is parsed and a notification is created using an intent and displayed on the UI panel. ***(20% of work time)***
7. **KIA (Know It All):** It is a knowledge-based module that enables users to get device related articles and tips on the go along with custom search. The module is implemented in such a way that it runs a job to gather the device data like make, model and OS version across its users’ base, and with a complex algorithm, generate custom articles/tips (HTML content) specific to the users' device and send it as a notification containing the article URL. For search functionality, the keyword is sent as service request and looked-up into articles repository and if available, content/article URL is delivered to the user as a response. If not, depending upon certain requirements like number of times that keyword is searched, an article is generated and stored on the repo so that it can be useful for later searches. ***(10% of work time)***

**Compare and Contrast Duties with his India team**:

Mr. Vishal Bhardwaj’s India team consisted of Prateek Patel, Prajakta Naringe, Yoganand Chillale and Pavan Kulhalli. Their duties that were insufficient to impart any advanced knowledge of Synechron’s SyneMobile, was as follows:

* Design test ­scenarios and validation (20% of their daily work time)
* Design User Interface for the application (20% of their daily work time)
* Automation test data creation (10% of their daily work time)
* Test integrated components of the application (30% of their daily work time)
* Checking for memory leaks and code validation (10% of their daily work time)
* Debugging of application (10% of their daily work time)

**He was paid more, due to his specialized knowledge:**

Mr. Vishal Bhardwaj’s salary in India has been 1172644 INR per annum, whereas the average salary for his classification is only 800181 INR per annum. This premium salary was due to his advanced knowledge of Synechron’s SyneMobile tool.

# Project Details

**Mr. Vishal Bhardwaj has been applying his advanced knowledge of our SyneMobile Tool since March 2016 till present while working on the following projects in India.**

### Project 1: Asurion-Protection App March 2016 - Till Date

**His working hours**: 40 hours per week

**His Role/Designation**: Lead-Software

1. Mr. Vishal Bhardwaj applied his advanced knowledge of Synechron’s SyneMobile tool to design and develop the end-to-end architecture for this protection application that provides a complete mobile solution including security, protection, tech support, and other value-added services in mobile insurance domain. He used his in-depth knowledge of the tool for the environment setup, integration among the modules of the tool, and configuration of the same***. (30% of his daily work time)***
2. Mr. Vishal Bhardwaj applied his advanced knowledge of Synechron’s SyneMobile tool to design and review of architectural-level templates of each module to fit into the redesigning requirements and the technical ability of the tool. It was targeted to find out the compatibility challenges, initial design errors, and integrity factors for coherent development to make a cohesive application. Focused on the enforcement of adhering to Synechron’s development guidance to ensure proper implementation and integration of different functional modules of the tool. ***(40% of his daily work time).***
3. Identified critical business scenarios that were a road block for Synechron’s SyneMobile tool and taken lead role on providing solution architecture for technical support, telemetry, error handling, data storage, device protection and its security ***(20% of his daily work time).***
4. He used his advanced knowledge of Synechron’s SyneMobile tool for creation of methods, built-In functions, automated build generation, folder creation for version control and data back up, and the code compilation of the tool developed during the initial development phase to ensure error free development and the quality of the product. ***(10% of his daily work time)***

Mr. Vishal Bhardwaj relied solely on his advanced knowledge of Synechron’s SyneMobile tool in performing these duties on this project.

**Compare and Contrast His India Team’s Duties:**

Mr. Vishal Bhardwaj’s India team consisted of Prateek Patel, Prajakta Naringe, Yoganand Chillale and Pavan Kulhalli. Their duties, which did not require or convey any advanced knowledge of Synechron’s SyneMobile tool, were as follows:

* Created user interface and new branding *(20% of their daily work time)*
* Created various test scripts and perform peer reviews of test cases *(20% of their daily work time)*
* Created required test data and run already created integration test scripts. Prepared and published daily test report *(10% of their daily work time)*
* Performed dry test run on a regular basis after development and integration of each module and also as per new changes as and when implemented. *(30% of their daily work time)*
* Performed code validation and used custom tools to check for any memory leaks throughout the application *(10% of their daily work time)*
* Performed debugging of the application to look for any potential crash and application breakdown *(10% of their daily work time)*

# Additional Information

### The Complex and Unique nature of Synechron’s SyneMobile tool.

Synechron’s SyneMobile tool possesses highly innovative methodologies that perform various complex functions vital to provide a complete mobile solution to any mobility domain enterprise, including:

* Cloud data backup
* Data integrity and security
* Device protection and recovery
* Device health monitoring
* Effective Telemetry and data analysis
* Real time technical support
* Value-add services

The combination of all these essential functions eliminates any chance of potential threats to a device, making it more secure and at the same time safeguarding the user’s data too. The SyneMobile tool is also uniquely scalable and portable to suit the fluctuating needs of the mobile insurance industry. The tool is a reliable means of providing a comprehensive mobile solution.

### How the tool’s knowledge differs from the core training provided to Synechron’s other employees?

This is borne out by the fact that Mr. Vishal Bhardwaj advanced knowledge of Synechron’s SyneMobile tool is totally non-existent outside Synechron. Furthermore, nothing comparable to that tool exists in the information technology industry. Hence, Mr. Vishal Bhardwaj advanced level of specialized knowledge cannot be taught outside of Synechron-supervised projects or classrooms due to their complex nature.

### Mr. Vishal Bhardwaj advanced knowledge of our SyneMobile tool has enhanced Synechron’s productivity, competitiveness, image, and financial position in the marketplace.

Mr. Vishal Bhardwaj has vast experience in the implementation of SyneMobile tool. He performed the following core job duties and responsibilities, which further enhanced his skills:

* Analyzed the need of handling complex and large volume of customer’s data and designed optimized algorithm to inculcate with our proprietary SyneMobile tool
* Conducted research on the threats of security vulnerability and developed an impermeable shield of security for data and safe storage of data backup by our tool to make Synechron more reliable and trustworthy solution provider in global market
* Requirement gathering and analysis to develop various function, libraries, interfaces, wrappers, reusable templates to reduce the development cost.
* Designed this tool to meet all specifications of code-independent and cost feasible.
* Customer centric development, flaw less reporting for decision making, version control and continuous integration features made this tool most agile advanced. This tool is customizable and can be seamlessly configured. Hence this made a brand image of Synechron.
* Conducted the basic internal training to development team on SyneMobile tool to make a resource pool that can be utilized to meet the deadline in any emergency
* Made higher level of encapsulation to provide different level of data complexity and its integrity.

SyneMobile tool has played major role in developing Synechron's productivity and image due to its features such as code-independent, environment independent, more agile, faster development and uniqueness, etc. Unavailability of Mr. Vishal Bhardwaj to lead this project will result not only in a financial loss to Synechron, but will also reduce its competitiveness by not being able to fulfill its agreements.

### Mr. Vishal Bhardwaj advanced knowledge of our SyneMobile tool can only be taught through prior experience with Synechron.

Mr. Vishal Bhardwaj is the Assistant Manager-Software for Synechron’s projects in SyneMobile tool implementation in the insurance industry. Mr. Vishal Bhardwaj is a key member in Synechron’s SyneMobile tool services, which is evident from the role he has played in the development and implementation of this tool.

Mr. Vishal Bhardwaj has in depth understanding of the tool and this is extremely important as this forms the base line for making decisions. Even single line in thousand lines of code may cause performance bottleneck and the same needs to be isolated through proper analysis and deep knowledge of the tool. Failure to do this would mean root cause of the performance is not identified and not fixed. This would pose huge risk since a system with such bottlenecks present would be unstable, prone to frequent crashes resulting in higher maintenance & interrupted services to end customers.

### How long it takes to train an employee to gain advanced knowledge in SyneMobile tool?

Due to the high degree of complexity involved in the SyneMobile tool, it would take any experienced lead or analyst, an extensive period to acquire advanced knowledge in those tools, at least 8-10 months with Synechron.

It can only be acquired through intensive project experience with Synechron, through applying those tools, or through formal training by Synechron.

As explained elsewhere in this letter, Vishal Bhardwaj acquired advanced knowledge of our SyneMobile tool from February 2015 to February 2016 in India, taking well over a year to do so. He subsequently spent well over a full year applying that advanced knowledge to further project work, as described in this letter – from March 2016 till present.

### The knowledge for this position is different than that for similar positions in the industry?

Mr. Vishal Bhardwaj employment with our company has provided him with in-depth knowledge and understanding of and experience with the highly specialized and unique coding attributes of our tool and database management, our project feasibility guidelines as well as our proprietary development to the SyneMobile architecture that applies to the insurance line of business.

Having worked with both on-site and off-shore teams, Mr. Vishal Bhardwaj understands which function is performed by each off-shore Caller Profile Automation, and coding team member and thus he is uniquely qualified to determine what information gets transmitted to which off-shore team member and the format in which this information is transmitted.

This specialized knowledge and proprietary experience gained by Mr. Vishal Bhardwaj with our SyneMobile tool, methodologies, techniques, and standards is unique within our organization. This knowledge is not available to an individual who has not worked for the Synechron group of companies.

### Infeasible to launch new training of Synechron workers in these unique tools.

It is not feasible to invest the time and resources to create more Synechron professionals with advanced knowledge in Synechron’s SyneMobile tool prior to embarking on this project. This measure would cause our company serious economic inconvenience, in terms of salary and training personnel, and in extended delays to Synechron.

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Mr. Rajul Mathur (Date signed)

(Associate Director - Software)