

# Mobile Applications in Life Insurance and Pensions

**An exploration of the benefits and challenges to using mobile applications to enhance life insurance and pensions**



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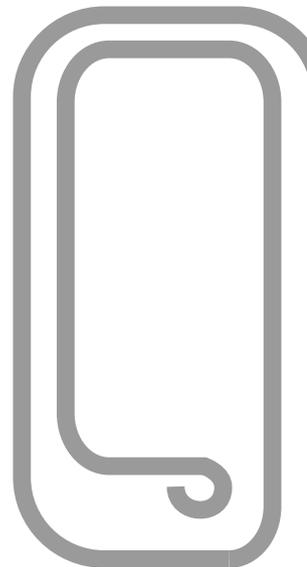
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# 1. Highlights

Over half of the population in most parts of the world is smartphone enabled.

High penetration of smartphones in both developed and emerging economies has led to a new era of innovation across all industries. While over half of the population in most parts of the world is smartphone enabled<sup>1</sup>, the insurance industry has been slow in catching up with this trend by employing mobility as a part of the business strategy. Due to the nature of the insurance business, mobile applications are currently more prevalent in general insurance than in life insurance. This paper outlines the factors affecting the development of mobile applications in life insurance.

The rate of adoption of mobile applications in life insurance and pensions is slower than the technological advancements. This creates immense opportunities for life insurance firms to develop mobile platforms and serve their customers. Development of mobile applications in life insurance is driven by processes required to streamline business functions. Operations, transaction, information, and marketing are the primary areas insurers may invest in as they begin to create mobile applications. Mobile applications in life insurance can enhance productivity and process capabilities, resulting in significant benefits and potential to attract the next generation of customers and enhance relationships with existing customers. It will also improve an insurer's ability to analyze and understand customer needs and promote the insurer's brand.



<sup>1</sup> Nielsen Global Smartphone Insights, first half of 2012; Nielsen Mobile Insights, 2012; "EU5 Smartphone Penetration Reaches 55 Percent in October 2012", comScore Press release, December, 17, 2012. ([https://www.comscore.com/Insights/Press\\_Releases/2012/12/EU5\\_Smartphone\\_Penetration\\_Reaches\\_55\\_Percent\\_in\\_October\\_2012](https://www.comscore.com/Insights/Press_Releases/2012/12/EU5_Smartphone_Penetration_Reaches_55_Percent_in_October_2012))

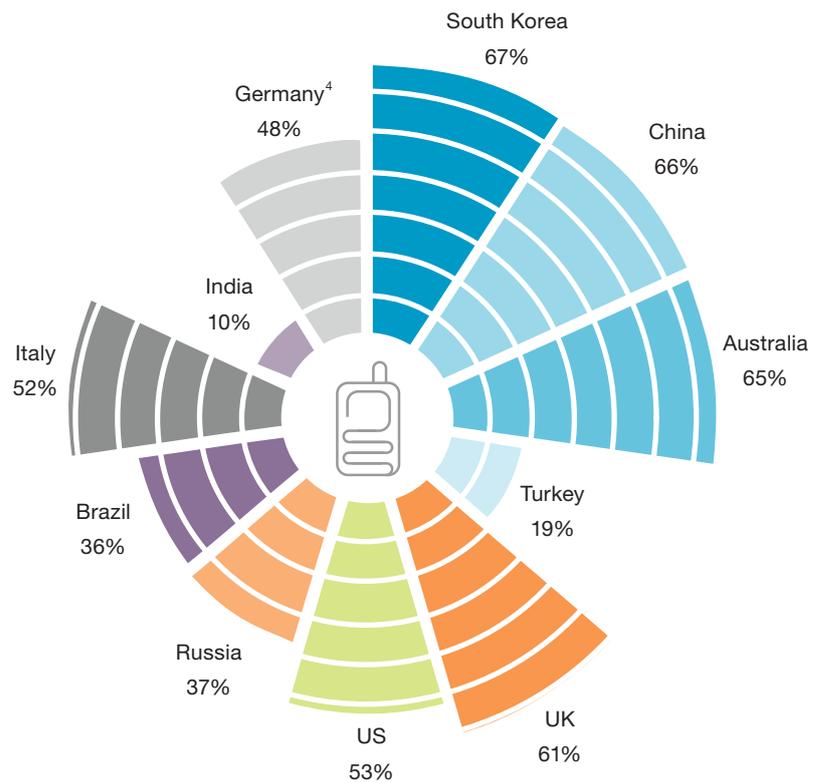
## 2. Mobile and Smartphone Penetration

Even though a majority of consumers in high-growth markets such as China and India own a mobile phone, there are notable differences in the type of mobile devices they own. The mobile devices are generally categorized into three groups<sup>2</sup>:

- **Smartphones:** Devices with advanced operating systems (with and without touch-screens)
- **Multimedia phones:** Devices with touch-screen and/or QWERTY keypad, but without an advanced operating system
- **Feature phones:** Devices with no touch-screen, QWERTY keypad, or advanced operating system

66% of Chinese mobile subscribers own a smartphone as compared to 10% in India, where feature phones are widely used (80% penetration). South Korea leads in both overall mobile ownership (99%) and smartphone ownership (67%).

Exhibit 1: Penetration of Smartphones by Country, 2012<sup>3</sup>



Source: Capgemini Analysis 2013, The Mobile Consumer: A Global Snapshot, February 2013, Nielsen; EU5 Smartphone Penetration Reaches 55 Percent in October 2012, comScore, December, 2012

<sup>2</sup> The Mobile Consumer: A Global Snapshot, February 2013, Nielsen

<sup>3</sup> Reported percentages for U.S. are based on Q2 2012 data

<sup>4</sup> For Germany, we have used comScore press release "EU5 Smartphone Penetration Reaches 55 Percent in October 2012", December, 2012 as source, 3 months average ending October 2012

According to Nielsen, the U.S. reported the lowest smartphone ownership as compared to the U.K., Australia, China, and South Korea, but it is steadily increasing. Mobile subscribers in Brazil and Turkey own multimedia phones, which have similar capabilities to smartphones but with no advanced operating systems such as Android or iOS. The previous exhibit shows the penetration of smartphone devices in different countries of the world.

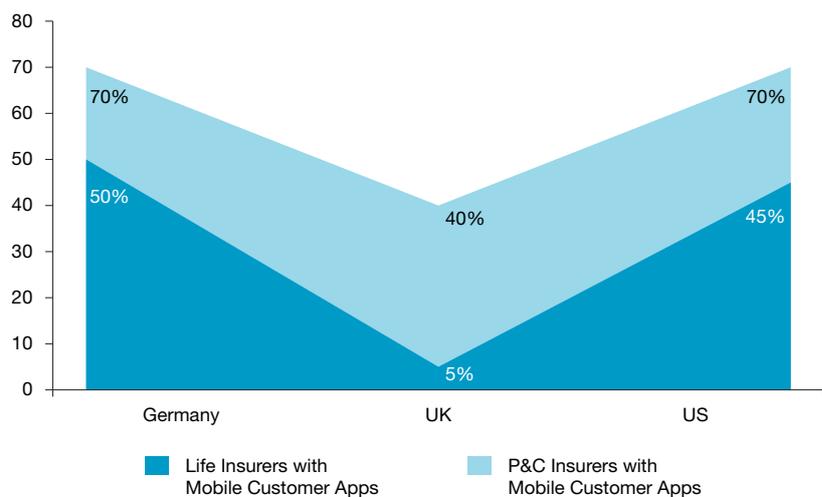
## 2.1. Mobile Applications in Insurance

According to 2012 Swiss Re Sigma data, Germany, the U.K. and the U.S. are among the five largest insurance markets measured by total premium volume. According to a survey<sup>5</sup> of 120 of the largest life and non-life insurers offering mobile applications, to customers on iTunes platform in these countries, it was observed that mobile applications are more popular in non-life insurance than in life. In both the U.S. and Germany the penetration level of mobile applications in non-life insurance is 70%, while the penetration level for life insurance is 45% and 50% respectively. Life and pension products are mainly sold via independent financial advisors (IFAs), and in the U.K., insurance selling through personal relationships with customers is highly valued. Hence the penetration of mobile applications is not as high as expected in this market. According to the survey, 40% of non-life insurers provided mobile applications, while only 5% of life-insurers could provide mobile applications to their customers.

Insurance mobile activities include requesting a policy quote, calculating retirement income, locating an insurance agent, and storing policy data.

Exhibit 2: Percentage of the 120 Largest Life and P&C Insurers Offering Customer Apps on the iTunes Platform in Germany, the U.K., and the U.S.

Insurance customers are increasingly turning to smartphones to access and share information, make transactions, and network without time and location restraints.

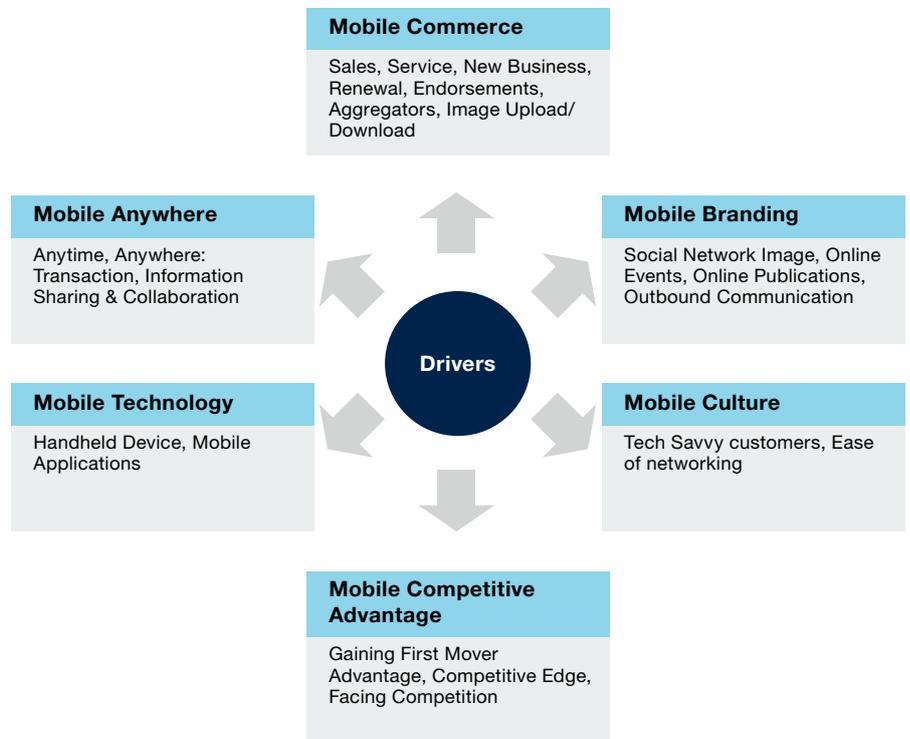


Source: Capgemini Analysis 2013; Based on a survey by Gartner, 2013

## 2.2. Drivers for Developing Mobile Applications in Life Insurance

Life insurers are increasingly employing mobility as a part of a business strategy to gain competitive advantage. As a part of this strategy, insurers are assessing business benefits and addressing the risk patterns arising out of such endeavors. Insurance customers are increasingly turning to smartphones to access and share information, make transactions, and network without time and location restraints.

Exhibit 3: Drivers for Developing Mobile Applications



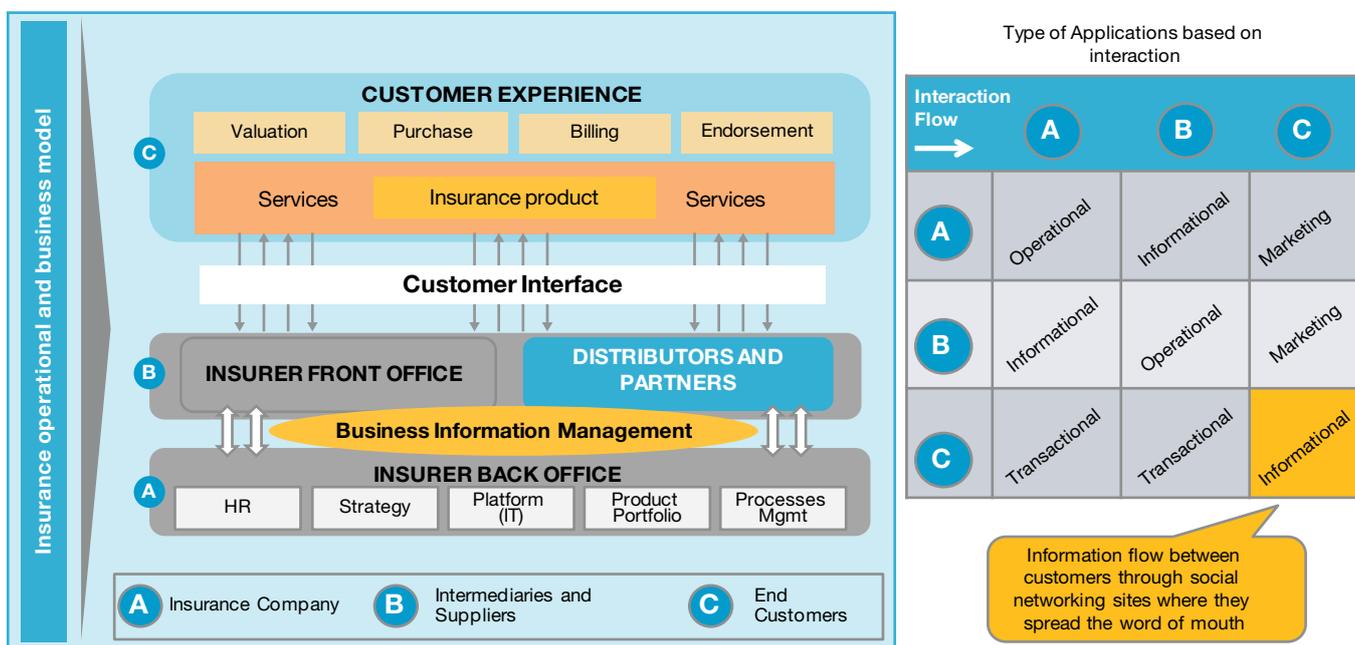
Source: Capgemini Analysis 2013

Insurers cannot ignore the benefits that can be generated by using mobile applications in brand building activities through social networking sites, online image, and outbound communications. These activities are already popular in other industries as well.

# 3. Mobile Applications and Potential Areas of Innovation

Development of mobile applications in life insurance is largely driven by processes intended to streamline their business. The exhibit below shows an insurance operational and business model. A detailed analysis of this model indicates that there is scope for applications to handle the interactions that emerge during various business processes.

Exhibit 4: Type of Mobile Applications in Life Insurance



Source: Capgemini Analysis 2013

There are three parts of the insurance business model: the insurance company, intermediaries/suppliers, and end users.

- Mobile applications which serve interactions between the company and intermediaries/suppliers are called **Operational Applications**
- Mobile applications which serve interactions intended to administer or modify a policy by end users to the company or intermediaries/ suppliers are called **Transactional Applications**
- Mobile applications which serve interactions intended to supply information without any consequence for the policy by the insurance company to intermediaries/suppliers are called **Informational Applications**
- Finally, mobile applications which serve interactions starting with the insurance company and intermediaries/suppliers to the end users are called **Marketing Applications**

### 3.1. Mobile Applications in Life Insurance

Mobile applications are available for different processes, but the rate of their adoption is slower than related technological advancements. Although insurers have developed some mobile applications, many areas in insurance processes are still untapped. Based on opportunity analysis, some potential areas of innovation have emerged.

Exhibit 5: Potential Areas of Innovation in Life Insurance

	Operational	Informational	Marketing	Transactional
Need Analysis and Prediction	<ul style="list-style-type: none"> <li>Providing personalized experience, enhancing the ability to sell the right product at the right time</li> <li>Mobile apps to help in "need analysis" and prediction of the next best product that can deliver customer delight</li> </ul>	<ul style="list-style-type: none"> <li>Implement mobile technology solutions to enable distributors and other partners to get information and manage end-to-end insurance transactions</li> <li>Provide mobile access to product catalogues, tools for need analysis, benefit illustrations</li> </ul>	<ul style="list-style-type: none"> <li>Leverage social media to increase lead generation (identifying potentially interested prospects)</li> <li>Increase customer involvement through rich interaction applications to promote insurance needs and careful behaviors</li> <li>Monitor and listen on social networks in order to get information to prevent complaints, improve service models, and build relationships</li> </ul>	<ul style="list-style-type: none"> <li>Post and track requests: Customers can request for a change in information and shall be able to track the progress</li> <li>Premium calculators: Applications for calculating premiums for the desired cover amount</li> <li>Payment services: Applications to allow customers to pay the premium</li> <li>Location intelligence: Application to provide information regarding the closest service provider as per the client's location</li> <li>Benefit illustrators: Application to provide information based on the desired customer benefits</li> </ul>
Customer Self Service	<ul style="list-style-type: none"> <li>Assess specific personal and investment insurance needs through interactive tool e.g. Need analyzer</li> <li>Obtain customized insurance solutions including need analysis, benefit illustration, etc.</li> <li>Full lifecycle policy services (e.g. change of beneficiary &amp; address, premium payment frequency, status inquiry, fund values)</li> </ul>	<ul style="list-style-type: none"> <li>Leverage on internal wikipedia and social network tools to share ideas, information and best practices amongst distributors and partners, to solve issues, and to activate alerts / processes</li> </ul>	<ul style="list-style-type: none"> <li>Mobile e-application, quote and policy purchase</li> <li>Access to "virtual assistance" for help &amp; advice instantly</li> <li>Mobile applications developed around social CRM, intuitive customer view supported with analytics, deal aggregation, loyalty services, location based offers act as catalyst in providing impetus to higher sales</li> </ul>	
		<ul style="list-style-type: none"> <li>A portfolio dashboard offering simple graphical tools to track and manage personal investments</li> <li>Instant chat apps where customers can receive valuable information on fund values, surrender values in real-time</li> </ul>		

Source: Capgemini Analysis 2013

### Operational

Mobile applications can be developed to gather intelligence around emerging customer needs and aid in designing customized products. Customer self-service applications can help assess specific personal and investments insurance needs, deliver customized solutions and benefit illustrations, and provide self-service options for the entire life cycle of the insurance policy. Applications can also be used for issuing policies on the fly using straight through processing, mobile payments, and e-signature capture. These policies are pre-underwritten in nature and involve capturing the basic financial and medical information of the prospect.

### Informational

Informational mobile applications can be developed to enable agents to manage end-to-end insurance transactions and share product information. Agents or intermediaries can also leverage such applications to share ideas, inform clients about events to come, update status on their savings account, and present best practices through social networks. Portfolio dashboards are another advantage that mobile applications can offer which will reduce several manual tasks.

### Marketing

Marketing applications can intensify interactions with customers through social media. Monitoring customers through such media would help insurers understand customer behavior, address complaints, improve service models, and build relationships. Such applications can also be leveraged to manage customer relationships through intuitive customer views supported with analytics, deal aggregation, loyalty services, and location-based offers that can act as catalysts for higher sales.

### Transactional

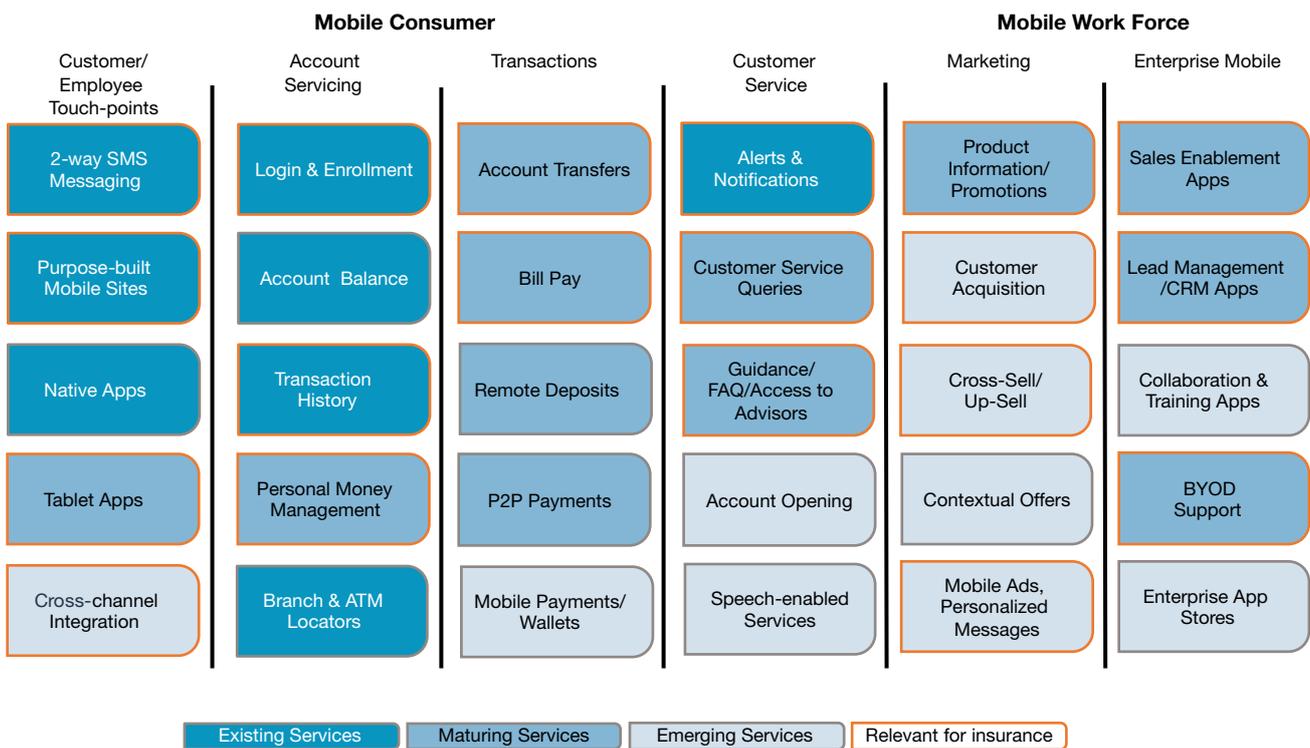
Applications that provide customers such options as premium calculations, payment services, fund switches, requested trackers, and benefit illustrators would help in improving client satisfaction.

### 3.2. An Illustration from the Banking Industry

To better understand the development and usability of mobile applications in life insurance, we can look at one of the financial industries where the usage of mobile applications is already successfully established. Mobile applications in the banking industry have gained a lot of prominence in recent years. Many banking services activities are now accessible through mobile applications. The following exhibit describes the best mobile application practices in banking. It also highlights services which are relevant to the insurance industry.

Life insurers that are subsidiaries of banking corporations (or vice-versa) can customize existing mobile banking applications for use in life insurance.

Exhibit 6: Mobile Applications from the Banking Industry that Are Relevant to the Insurance Industry



Source: Capgemini Analysis 2013, The Mobile Consumer: A Global Snapshot, February 2013, Nielsen; EU5 Smartphone Penetration Reaches 55 Percent in October 2012, comScore, December, 2012

A number of challenges can be hurdles in implementing mobile applications:

- High cost
- Technology compatibility
- The technical skills of employees
- Network or bandwidth constraints
- Online data updates
- Device design/model
- Data security

### 3.3. Challenges in Maintenance and Adoption of Mobile Applications

Mobile applications can simplify various processes and minimize the hustle of various operations and manual tasks. It can transform how the life insurance industry functions and attract a younger generation to buying life insurance products. Despite these benefits, there exist certain challenges in adopting and maintaining mobile applications.

The longer term nature of life insurance contracts and the sensitive nature of information gathered during the issuance of a policy make the adoption of mobile applications complex for insurers. However, by efficiently leveraging data masking / scrambling techniques, insurers can overcome this challenge. Current web-based applications can be used as templates for developing similar applications on multi-platform / multi-device applications.

The following exhibit illustrates the various challenges that can emerge while adopting mobile applications in life insurance. It also depicts the level of hindrance in business functions created by these challenges.

Exhibit 7: Challenges in Maintenance and Adoption of Mobility Solutions

Challenges	Description	Level Of hindrance
<b>Cost of devices and applications</b>	<ul style="list-style-type: none"> <li>• The rate of speed of innovation in mobile devices is bound to add complexities for the IT departments to resolve with an ever shrinking budget</li> <li>• Insurers invest in devices and applications but it is difficult to calculate return on such investments</li> </ul>	
<b>Regulatory Boundaries</b>	<ul style="list-style-type: none"> <li>• It is an insurer's responsibility to ensure that the proper policies are in place to ensure that financial representatives registered with Financial Industry Regulatory Authority<sup>®</sup> (FINRA) are regulated in their communications with customers and usage of mobile device (versus a company issued or locked down computer) to send messages, or if social media applications are used that meet the compliance regulations</li> </ul>	
<b>Lack of Tech Savvy Agents</b>	<ul style="list-style-type: none"> <li>• Life insurance and pension business is advisory driven and agents or brokers still rely mostly traditional channels during customer interactions</li> <li>• Insurance agents, who are accustomed with advanced technical methods are required and who can help in generating new businesses through mobile applications</li> </ul>	
<b>Data Security</b>	<ul style="list-style-type: none"> <li>• Data security is one of the major concern in adoption of mobile applications in Life Insurance</li> <li>• With an effort to address this issue, developing mobile applications becomes more complex and costlier</li> </ul>	
<b>Wireless Coverage</b>	<ul style="list-style-type: none"> <li>• Mobile web needs constant network connectivity hence mobile web support is required for a broader reach</li> </ul>	
<b>Code Synchronization and updates</b>	<ul style="list-style-type: none"> <li>• Once the application is launched it is necessary to have continuous updates, new releases of functionality or security</li> </ul>	
<b>Screen Size</b>	<ul style="list-style-type: none"> <li>• Considering the small mobile screens and limited output options, the design and delivery of excellent mobile experiences is a challenge where customers continuously seek for convenient navigation, immediacy, simplicity, and context</li> <li>• To be successful and address the lack of screen size, the apps have to be highly relevant and very straightforward</li> </ul>	
<b>Platform Operating System Inconsistency</b>	<ul style="list-style-type: none"> <li>• Constant innovations in mobile platforms is leading to regular emergence of new mobile operating systems, hence it is difficult for insurers to develop applications matching the speed of such innovations</li> <li>• Building or updating applications common to all platforms will be a challenge for most firms</li> </ul>	
<b>Access to Additional Hardware Like Printer</b>	<ul style="list-style-type: none"> <li>• Additional devices like printer or external storage devices are necessary to complete the sales process. For example, mobile devices may allow real-time policy issuance but a printer is required to print the policy for the customer</li> <li>• A mobile phone alone cannot support all the transactional needs of an agent</li> </ul>	
<b>Data Synchronization with Mobile and Source Data</b>	<ul style="list-style-type: none"> <li>• A big opportunity in the adoption of mobile in Life insurance industry is the ability to integrate a mobile app into the execution of day-to-day business processes</li> <li>• Currently mobile applications lack the functionality to communicate with enterprise applications at the core of a business, this further extends the development process and requires prior knowledge of the core applications that the mobile application is required to connect with</li> </ul>	

Source: Capgemini Analysis 2013

### 3.4. Innovation and Mitigation of Challenges

Various challenges are identified in the adoption of mobile applications in life insurance. These challenges can be mitigated to an extent by the use of cloud-based applications and by using Infrastructure as a Service (IaaS) or Policy Administration as a Service (PAaaS) solutions. Applications with minimum front end processing can also help in reducing the intensity of such factors to a certain extent. IaaS and PAaaS based solutions can also improve data security, online data updates, and device design/model.

The following exhibit presents different innovative solutions to mitigate these challenges and enable smooth implementation of mobile applications.

Exhibit 8: Innovation and Challenge Mitigation

Parameter for Innovations Challenges	Innovation and Impact on Identified Challenges						
	OS Agnostic Apps	Minimum Data Entry Apps	Very Light Apps	Minimum Front end Processing	Cloud based Apps	IaaS <sup>a</sup> / PAaaS <sup>b</sup>	Data Encryption
<b>Cost</b>							
<b>Platform / Technology Compatibility</b>							
<b>Technical Skills of Employees</b>							
<b>Network / Bandwidth Constraints</b>							
<b>Online Data Updates</b>							
<b>Device Design / Model (BYOD)</b>							
<b>Data Security</b>							

Strong Influence      Weak Influence

Source: Capgemini Analysis 2013

Hence it would be advisable for insurers to develop applications based on the innovative solutions recommended earlier. This way, insurers would be able to clear majority of the obstacles and successfully deploy mobile applications for various life insurance functionalities.

# In Practice: Allowing Customers in Asia to Apply for Life Insurance on the Move

## Challenge

A large European insurance group was looking to build an application to be used by life insurance agents in Asia to present different insurance plans and enable customers to apply for the plan on the go.

## Capgemini's Solution

Capgemini created an iPad application which lets agents perform financial need analysis by capturing customer data in a detailed information form. The app generates a customer benefits illustration and product summary; allows customers to submit applications real-time; and includes additional features such as a calendar function, physical signatures, and content viewer to load presentations or PDFs.

## Benefits

The application lets our client increase agent efficiency and eliminate the need for product launches by providing a single, on the go source for customers. PDF generation, physical signature and e-submission features allow customers to submit applications in real-time.



## 4. Conclusion

Mobile applications in life insurance provide numerous benefits. While adopting mobile applications in life insurance presents challenges, changing customer behavior and technological advancements make it imperative. Adoption of mobile solutions in life insurance has been slow. However mobile solutions offer great opportunities in terms of operational, transactional, marketing, and informational processes. Mobile offerings would allow a younger generation to connect quickly and explore products, making the life insurance and pension market more attractive than before.

Mobile solutions will make connecting with customers easy, leading to improved relationships. Accessing information through hand held devices would result in more effective and streamlined quotation, renewal, and cross-sell processes. This will result in improved flexibility in matching products with customer demands. Insurers can reinforce their brand and create better visibility by reaching out to a vast number of customers effectively through hand held devices.

The banking industry has already shown that mobile applications are embraced with greater speed than they are developed. The general insurance industry is also racing ahead in adopting this technology and reaping the benefits. Life insurance companies need to realize the immense potential offered by mobile applications in growing their business.

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## About the Authors

**Shradha Verma** is a Consultant in Capgemini's Strategic Analysis Group within the Global Financial Services Market Intelligence team. She has experience in strategy analysis focused on the insurance domain.

**Luuk van Deel** is a Lead Consultant in the Life and Pension industry for Capgemini. He has over 30 years of experience in the insurance industry serving insurers across the Netherlands. Luuk owns and facilitates Life & Pension courses for Capgemini University and he leads Capgemini's Global Center of Excellence for Life & Pensions.

**Ravi Nadimpalli** is a Manager for the Global Centre of Excellence (Life & Pensions) at Capgemini. He possesses a Masters degree in Risk Management & Insurance from the College of Insurance (now part of St. John's University), New York. He has been associated with the insurance industry in India for more than a decade, and has over 8 years of experience as an insurance subject matter expert and domain consultant.

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