



ADOPTING PERSONALIZED VIDEO-BASED COMMUNICATIONS EFFECTIVELY WITH INFOSYS PSV ON AWS STACK

How Video-based Communications & Personalization are Becoming a Trend

With the advent of social media and other digital channels, videos seem to be the most preferred mode of communication compared to any other. This is because videos are more pervasive, effective, and have a greater impact. We as humans process videos much faster than reading

text and retain more information when we see as opposed to when we read.

According to Forrester, a video is 50 times more likely to land on the first page of search results compared to a text-based page. In the present scenario, video-based communication is a must for customer engagement, and enterprises have been utilizing videos for a wide range of activities, such as product demonstrations, advertising, marketing, and campaigning. The traditional way of communication via

SMS, Email, and chat messages won't be of much help as they were just fit for the purpose.

Videos, supported by a significant amount of personalized data, are a need for enterprises that value customers. Thereby, this helps the enterprises redefine the customer experience, simulate 1:1 engagement, and proactively engage with the customers in all the stages of the customer journey.



What are Personalized Smart Videos?

In today's world, people want to be aware of so much that they actively look for relevant information across various channels. Blending the power of personalization with video information can help in effectively engaging with the customer. It will not only help the enterprises manage the overall customer relationship journey but also reduce the overall operational cost of customer service.

For instance, consider the generic case of billing statements for credit card and

utility bills, which are communicated through letters or emails and often seem to be missed by the end user. Besides this, these letters and emails contain a lot of information and terminologies, which are often difficult for the end user to consume and to examine the critical information like due date, payment information, change in tariff, etc. Thereby, it leads to multiple calls to the customer support team to seek assistance. Although a lot of data is being analyzed by enterprises to predict the kind of queries a customer can pose, the question remains whether this can help us answer the queries in advance. Personalized communication over video

has a lot of advantages, like increased customer satisfaction, redefined customer experience, and so on.

A personalized smart video is a fusion of personalized data and other digital elements such as audio, video, image, text, charts, documents, and web forms, all of them stitched together to narrate a particular user story that the customers are interested in. Such videos are not only unique to each user but also are very secure and can be delivered to the end users via various channels such as mobile apps, text messages, email, and social platforms across multiple devices.



Challenges in Delivering Personalized Video Messages

Over the last few years, personalized content-rich campaigns have become increasingly important. Quickly churning out content and delivering it to the targeted customers is the key challenge for enterprises in video personalization. An enterprise conveying its new product messaging across millions of users, tailored and customized to each of them in real-time, would open a world of opportunities.

Infosys PSV - A Patented Video Personalization Technology

Infosys Personalized Smart Video (PSV) platform curates and delivers personalized videos for multiple end users in no time. PSV is a highly scalable real-time video personalization platform that leverages various in-built personalization elements to transform a generic video message into highly intuitive and personalized video communication. The platform studio provides an effective way to

create content-rich interactive videos that essentially contextualize end user information. PSV enables Infosys clients from various industries to assemble personalized storytelling relevant to their customers and reimagine the engagement experience.

A patent was successfully granted for the application titled '**System and Method for Dynamic Generation of Personalized Video Content through a Browser Embedded Video Player**', which is the core technology powering the PSV platform.



How PSVs are Delivered using AWS Technologies

PSV can be delivered efficiently and effectively using a robust cloud-based technology ecosystem. AWS is one of the very powerful offerings by Amazon that allows serverless computing and website hosting at ease with scalability. AWS has out-of-the-box, solid analytics and reporting capabilities that help make PSV an end-to-end efficient solution.

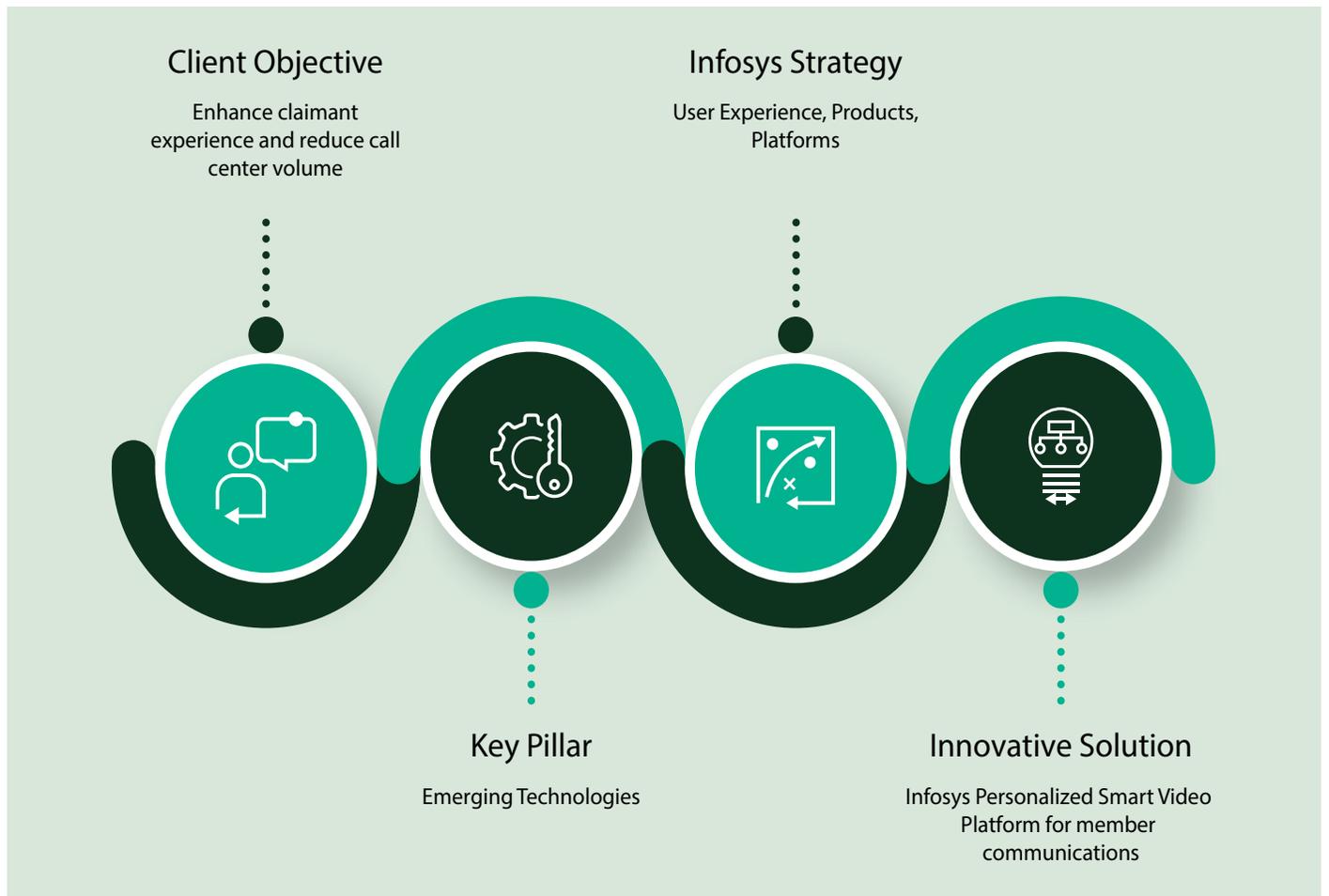
Here are AWS technologies that play an important role in bringing strong personalization capabilities to PSV:

AWS Technologies	How is it used in PSV?
Amazon Polly	Amazon Polly is used for providing Text-to-Speech service to personalize audio messages dynamically in PSV videos.
AWS Lambda	AWS Lambda is used for Polly Text-to-Speech implementations to personalize dynamic audio messages in PSV. AWS Lambda automatically runs code in response to multiple TTS requests via Amazon API Gateway.
Amazon API Gateway	Amazon API Gateway pulls information from backend systems to PSV and sends Polly TTS requests through AWS Lambda.
Amazon S3	Amazon S3 stores, protects and retrieves all PSV static content, such as template video and PSV metadata.
AWS CodeCommit AWS Codebuild AWS CodeDeploy AWS CodePipeline	These AWS services helped the development team to improve PSV workflow by providing tools for version control, building, and testing code, deploying applications to servers, and automating the release process, which increased productivity, improved collaboration, and streamlined the software development lifecycle.
Amazon CloudFront	Amazon CloudFront is a CDN used to deliver all PSV static content like video and PSV metadata to customers globally.
Amazon Route 53	Amazon Route 53 is a DNS that connects PSV requests to Amazon S3, Elastic Load Balancing load balancers, and CDN.
Amazon QuickSight	Amazon QuickSight is used to create a visualization of insights and analytics of PSV videos, like the number of users who watched the video, average video view time, etc.
Amazon Simple Notification Service	Amazon Simple Notification Service is used to push PSV video links through email or SMS to end users.
AWS Web Application Firewall	AWS WAF is used to safeguard PSV videos against common web exploits.

Case Study: A Large US-based Investment & Insurance Client

The client, one of the leading Insurers in the USA, has embarked on a multi-year digital transformation across all their business segments – such as Property and Casualty, Commercial, Group Benefits, Specialty, and others. Adoption of emerging technologies is a core strategy for achieving the company's goal to simplify and optimize ways of working, increase execution speed, lower operating costs, and enhance user experience. The Infosys PSV platform (Personalized Smart Videos) was evaluated and recognized by the client as a solid solution that deeply aligned with the client's digital strategy. The PSV solution leverages Infosys's innovation and IP capabilities to achieve process optimization, reduction in call center volume, and improved customer experience.

The Infosys team proposed an end-to-end SaaS solution to enhance the experience for the claims users and reduce call center volumes related to claims letters.



Claims decisions are traditionally communicated through cover letters and emails. In addition to being slow and often being missed, these communications are difficult for customers to fully interpret and take appropriate action, thus leading to multiple calls to seek assistance from the client operations team. The Infosys PSV solution transforms this experience with personalized, intuitive video messages to explain the claim decisions and next steps. Infosys delivered a unique value proposition by crafting an end-to-end solution with the collaboration of the PSV Platform + Domain expertise + Creative Design. The creative design capabilities of the Wongdoody team (Infosys Subsidiary) provided a superlative client experience by crafting designs of end user personas and creating video prototypes. The PSV solution is deployed as a robust cloud solution with an easy pay-per-use licensing model that further adds to the client's cost optimization goals.

Conclusion

The Infosys Personalized Smart Video platform can create a plethora of personalized videos for a range of industries. This solution powered by AWS services has been specially crafted to enhance the customer experience. Additionally, the PSV can seamlessly integrate with industry-standard data sources such as CRM and use that user data to embed in the template video at run time. The video plays on all the standard browsers, such as Firefox, Safari, Chrome, and Edge, via multiple devices, building a wide customer coverage.

With the ability to generate millions of personalized videos in real-time and effectively utilize the powerful personalization capabilities available out of AWS, PSV has become one of the key products in the customer experience space.



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