

OPENI a personal cloudlet for your mobile applications.

Partners

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Table of Contents

1	Introduction to WP6 MyLife task3
	1.1 Application prototype overview: PhotoLife
	1.2 Application prototype overview: HealthLife
	1.3 Application prototype overview: FinancialLife
	1.4 Application prototype overview: MessageLife



1 OPENi WP6: MyLife task

In D2.4 Three Use Cases were analysed, in which the most complex of these was MyLife. MyLife was rendered as a future imaginative cloud service comprising of several applications. The MyLife use case comprises the following scenarios, each with a corresponding application prototype in WP6:

- PhotoLife scenario -> PhotoLife application prototype: to capture, express and share personal photos and videos;
- HealthLife scenario -> HealthLife application prototype: to follow-up and monitor the various activities for increasing the general physiological health and fitness level of users;
- FinancialLife scenario -> FinancialLife application prototype: to support online stock trading;
- **MessageLife scenario -> MessageLife application prototype**: to support unified communication and messaging across applications;

1.1 Application prototype overview: PhotoLife

Partner	AmbieSense
High-Level Scenario from D2.4	The Jones Family are active users of social networking sites and in particular of the available photo sharing and storage capacity, with accounts on Facebook, Twitter, Instagram and Picasa to name a few. Combined with these sites, the family members have mobile devices with local storage. Having photos in several locations makes it difficult to categorise and organise a consolidated view for the whole family who often tends to forget the location where specific files have been stored. The accounts used by the family to access these photos are authorised through their Cloudlets allowing the Cloudlet a view into the metadata associated with each photo that may not be stored locally. The PhotoLife application utilises the contextual information and metadata associated with each photo (irrespectively of the cloud-based services or the cloudlet from which they have been retrieved) and consolidates all photos into a timeline view, pointing the user to the location where the image is stored. Comments and social interactions provided by friends are associated dynamically with the relevant photos. As the family have a cloudlet per member, they have authorised each other's cloudlets and specific relevant photo sets to be distributed among each family members timeline. This allows holiday photos and albums of events that are shared to be distributed and viewable by each family member. It also allows family members to have
	viewable by each family member. It also allows family members to have personal photos which are not shareable or viewable to other cloudlets, providing a degree of privacy to their lives.

Variant:

	The Jones family are on a holiday. Mary, Ryan and Peter each have their smart phones with them and Mary also has a high-powered digital SLR. While on holiday, Peter takes a number of photos and uploads them to his Facebook profile to show his friends what a great time he is having. Additional information such as his location and his check-in are also associated with the photo. Ryan has a Dropbox account, which is synched to his phone, each photo he takes is dynamically backed up into the Cloud to provide reassurance in the case of a problem with his phone. Mary, a Picassa and Twitter user shares some of her mobile photos to her friends and followers. The digital SLR records the bulk of the photos that Mary takes on the holiday, including some priceless childhood memories of Jane's first foreign holiday. When they return home, Peter and Ryan both create separate Facebook photo albums into which they upload their holiday snaps, tagging relevant photos. Mary uploads her holiday photos to Picassa creating different albums. A separate album of photos involving Jane is also created and stored on Picassa with private permissions. The family shares their various albums through the PhotoLife application, and includes certain albums for friends and extended family to view. The albums involving Jane are only shared with immediate family.
Overall functionality	 PhotoLife is an innovative web application to capture, annotate, repurpose, share and express personal photos and videos for the mass market. The overall functionality of the application prototype was presented in form of five PhotoLife scenarios: PL.1: Account Management
	PL.2: Photo Organisation
	PL.3: Photo Interaction
	PL.4: Postproduction and Sharing
	PL.5: Photos Synchronised with Cloud Storage
Dependencies:	Platform component assumptions from requirements phase:
WP4 platform	Personal cloudlet
functionality	Privacy controls
	Search API
	Why use OPENi platform for PhotoLife (from D2.4):
	• The OPENi cloudlet enables access to personal photo collection across
	personal devices and cloud storage services.
	• It supports easy sharing of photos with family and friends across





1.2 Application prototype overview: HealthLife

Partner	CGI
High-Level Scenario from D2.4	Peter still needs help for some daily activities in order to lead a life with no barriers from his illness. His family also need reassurances that he is ok and is up to date on his medication. His mother has to deal with his doctor's appointments and his dietary requirements. Peter can use Diabetes applications that are empowered by the OPENi platform to share this information with the HealthLife application. Blood sugar readings from his medical device and associated activities recorded in his calendar system, such as football practice, can be combined with his diet application, which records what he ate and when he ate it. By accessing HealthLife, Mary can learn how her son's blood sugar is responding to his various activities and how his diet is impacting on it. This can provide her with reassurance that her sons illness is under control. Peter's doctor also has access to this information providing another layer of security for reassurance. Mary is also concerned about creating a healthy lifestyle for her children, with diet at a young age important. Jane's preschool teacher has permissions to exchange information with Mary's cloudlet. Utilising the MessageLife and PhotoLife applications, Jane's teacher can upload pictures of Jane eating a healthy lunch in school and participating in the school's physical education activities.
	Ryan is on the road to recovery from a serious knee injury and keen to get back in training with his rugby teammates. His physio, gym instructor and

coach are all users of the HealthLife application and have set out training



	exercises and tests for Ryan to compete before he can come back to full fitness. Ryan attends the gym on a regular basis and takes pictures of his strength work gains to gauge his progress. These are available through his PhotoLife application. He additionally has installed both FitBit and Nike+ applications on his phone and other smart apps in his watch, which record his heart rate, his distance travelled and the duration of activities. Ryan also schedules additional training exercises using his calendar system. This information is taken in by Ryan's cloudlet and shared out via the HealthLife application giving his coach and physio an up to date view of his progress. It also allows them to communicate with Ryan if they detect a problem or allow them to make changes to his routine if they see he is making progress beyond their expectations.
Overall functionality	 The following five scenarios were described in a version of D2.4: HL.1: Personal exercise and food diary HL.2: Remote follow up of exercises HL.3: Training on your own HL.4: Training with friends HL.5: Needing help in daily activities
Dependencies: WP4 platform functionality	 Platform component assumptions from requirements phase: Personal cloudlet Privacy and Security components

1.3 Application prototype overview: FinancialLife

Partner	CGI
High-Level Scenario from D2.4	Mary regularly uses PayPal to authorize payments for purchases she has made on Ebay. All three members of the family use their smart phones to purchase applications through the Play Store and their Google Wallets as well as for general shopping in Amazon. Mary and Ryan are particularly eager to monitor the purchases made by their son who is not in employment. Their cloudlets are connected for payment issues and Ryan and Mary can each see the family's online transactions. Ryan through his job is also a Financial Advisor who is interested in the stock market. His FinancialLife application is a gateway to the various stock market applications and news feeds that he regularly uses both in work and on his mobile device. By using the FinancialLife application Ryan can see his family's outgoings in a timeline and also see stock prices that are of



interest to him and his customers.	
Variant:	
Ryan's work as a Financial Advisor requires him to be in a position to change	
investor's portfolios at a moment's notice. He finds the constant news feeds	
from stock market applications, presented in one central application ito be	
invaluable. FinancialLife allows a safe and secure platform from where Ryan can	
buy and sell shares in large quantities. Prior to the security offered through	
FinancialLife, Ryan felt uncomfortable trading via his smartphone which was	
often a necessity with the time sensitive nature of shares. Now, he feels secure	
trading wherever he is and this enables him to spend more time with his young	
family.	
The following five scenarios were described in a version of D2.4:	
• FL.1 : Finance management	
FL.2: Financial news aggregation	
FL.3: Financial indicators	
FL.4: Stock trading	
FL.5: Stock tracking	
Platform component assumptions from requirements phase:	
Personal cloudlet	
Security and Privacy components	

1.4 Application prototype overview: MessageLife

Partner	WIT
High-Level Scenario from D2.4	Unified communication across messaging and communication services is becoming increasingly important for individuals and organisations. MessageLife is a unified communications solution because it will be able to work across applications, personal devices, and cloud services. The Jone's family use MessageLife to manage their calendaring system and track their emails and Instant Messaging conversations. Mary recently booked a hotel through a video call to the hotel reservation office using a cloud-based conference system with instant messaging and the possibility to share web pages and submit web forms to the hotel reservation system. The receptionist answers with video and Mary asks about the reservation possibilities and prices for the period. The receptionist shares the online reservation page with Mary and they complete the reservation together. Mary receives both a text message and email with the calendar event attached to both reservation confirmation messages. These



	events appear in the MyLife application timeline showing what medium used to communicate and who she communicated with. Important conversations and information regarding the booking of the hotel are distributed to her husband. These include information relevant to the trip which synchs into the MyLife application and into the various MyLife facets. This could include information such as the hotels gym programs synched into Ryan's HealthLife application, a picture of the hotel rooms, synched via the PhotoLife application and the credit card charge updates on Ryan's FinancialLife application. Additionally messages and calendar invites are sent to Ryan's brother who has agreed in advance to mind the kids when they are gone for the weekend. Jane's preschool teacher is also notified of a change in person who will collect Jane.
Overall functionality	 The following two scenarios were described in a version of D2.4: MSGL.1: Support for unified communication and social media services MSGL.2: Organising and sharing activities and events across applications The lead partner for developing and implementing MessageLife is WIT.
Dependencies: Needed WP4 platform functionality	 Platform component assumptions from requirements phase: Privacy policy controls Social networking services, blogs, email, text messaging, calendar, web real-time communication. Personal cloudlet