

Fictional Project Plan for Airbnb Multicurrency Wallet



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1. Overview

Airbnb guests typically book host facilities that are not in their country of residence. Making payment to foreign banks and merchants can be tedious to say the least. There is now a plan to include a multicurrency wallet in the Airbnb application. This feature will apply to both the Host and the Guest.

A Guest can load and hold funds in a currency of his convenience. For example, an American can load US Dollars, debited from his credit card on the mobile app. When (s)he travels to Kenya, (s)he can convert any or all the amount into Kenyan Shillings. This electronic value (e-value) after conversion still resides in his or her multicurrency wallet.

At the point of payment, (s)he can securely transfer this e-value to the wallet of the Host. The Host at any point in time has the option to then cash out the value at an Airbnb agent or bank, or can transfer it to yet another Airbnb app user.

The quick and easy circulation of e-value within the Airbnb app will have many benefits for both Guests and Hosts and further promote the core business.

The pilot of this project is to happen between USA and Kenya. Thereafter it will be rolled out across multiple countries. The wallet will be supported by both the Android and iOS version of the Airbnb app. The go-live date for the pilot is 6 months from the onset of this project.



Figure 1: Flow of Funds



2. Goals and Scope

2.1 Project Goals

Project Goal	Priority	Comment/Description/Reference			
Functional Goals:		For details see the Project Requirements Specification 0			
Remittance	1	User remits funds between North America and Africa using smartphone application.			
Multi-currency Value	2	Smartphone application allows for user to hold electronic value in various currencies.			
Agency Network	1	Users can top up the value in their e-wallet from designated physically based agents.			
Business Goals:					
Time-to-market	2	Application has to be beta launched in USA and Kenya within 6 months.			
FX Feed	1	The foreign exchange rates will be set by Bank xxx.			
Cost	2	The total budget for the first year should not exceed USD \$xxx			
Technological Goals:					
User base	3	System should support a minimum of 100,000 smartphone users.			
Quality Goals:					
PCI DSS	3	The server environment is certified a minimum of Level 4 PCI DSS			
Constraints:					
National Standards	1	The system adheres to the money service regulations in each country it operates in			
Mobile Platforms	1	The application should work on Android v4.4 and up, iPhone IOS v5 and up.			
SMS Notification	3	In some countries the subscriber may receive an SMS confirmation upon successful funds transfer.			
KYC	1	Know-Your-Customer (KYC) is to be performed by Agents. This includes capturing the subscriber's photo, national ID and physical address details.			

2.2 Project Scope

The main aim for the project is to allow the Airbnb app to hold funds in multiple currencies as well as transmit the funds to other Airbnb apps.



2.2.1 Included

The deliverables of this project and their receivers are listed in detail in the delivery plan in chapter 10.

2.2.2 Excluded

This project will exclude the use of paybill and USSD as a means of money transmittance.

3. Organization

3.1 Organizational Boundaries and Interfaces

The backend Airbnb payment gateway will have to interact with the following external systems:

- Visa
- Mastercard
- Kenya Commercial Bank (KCB)

3.1.3 Resource Owners

Resource Owners are defined in the Resource Plan in section 5.1.

3.1.4 Receivers

Receivers are defined in the Delivery Plan in section 10.

3.1.5 Sub-contractors

Sub-contractors are defined in the sub-contract management in section 8.

3.1.6 Suppliers

Company: Contact	Deliverable	Comment
Kenya Data Networks	Data Centre	Hosting of Kenyan bank interface module.
Global Payment Aggregator	Payment Interface	Payment API into Visa and Mastercard network.

3.1.7 Cross Functions

Here are all functions within the organization that are involved in/contribute to the project.

Function	Dept.: Contact	Responsibility/Comment
Product Mgmt	Jeremy Holtz	Ensure seamless use with the rest of the Airbnb app
Marketing	Sheila Smith	Create market awareness
Sales	John Black	Trial with a number of premium Guests and Hosts
Training	Rose Wolf	Customer Service awareness of the product
Supply Mgmt	William Jack	Coordinate with suppliers for delivery of relevant components



3.1.8 Other Projects

Here are external projects with which the Multicurrency Wallet depends on.

Project	Org.: Project Mgr	Dependency	Comment
KCB Upgrade	KCB: Stanley Mucheke	KCB Interface	Kenya Commercial Bank (KCB) is to upgrade their core banking system in order to cater for Airbnb

3.2 Project Organization

Project Team Development

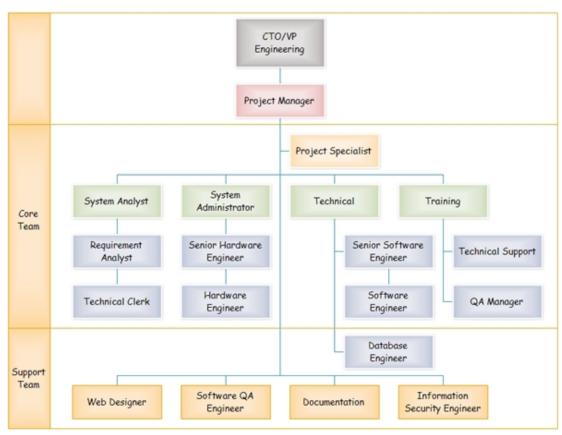


Figure 3.2: Functional Organizational Chart



3.2.1 Project Manager

Role	Organization: Name
Project Manager	Airbnb: Michael Wakahe
Technical Project Mgr.	Crossover: Charles Jackson

3.2.2 Project-internal Functions

Name	Group	Function	Responsibility	Contacts
Michael Wakahe	Project Office	Core Team leader (Project manager)	Leading & managing Business Team. Schedule and budget authority for project. Single-point contact with TDC, an outside development organization.	Email: Phone: Location:
John Engineer	Engineering	Development lead	Creating H/W & S/W architecture; tracking engineering team schedules	Email: Phone: Location:
Roy Marketing	Marketing	Product Manager	Managing the Requirements Spec; participating in Issue Management meetings, participating in all cross- functional reviews, communicating with customer	Email: Phone: Location:
Jill Operations	Manufacturing	Manufacturing Liaison	Owns Manufacturing Plan and tracking the mfg. deployment schedule	Email: Phone: Location:
Pat Outsource	Software Development	Project manager and lead software engineer.	Single-point contact for all coordination of TDC work with our own. Periodic reporting on schedule progress and budget for TDC work.	Email: Phone: Location:

3.2.3 Project Team

The Project team directory for all communications is as follows:

Name	Title	Email	Office Phone	Cell Phone		
John Davis	Project Sponsor	j.davis@air.com	XXX-XXX-XXXX	XXX-XXX-XXXX		
Joe Green	Project Manager	j.green@air.com	XXX-XXX-XXXX	xxx-xxx-xxxx		
Herb Walker	Senior Programmer	h.walker@air.com	XXX-XXX-XXXX	xxx-xxx-xxxx		
Jason Black	Programmer	j.black@air.com	xxx-xxx-xxxx	xxx-xxx-xxxx		
Mary White	Sr. Quality Specialist	m.white@air.com	XXX-XXX-XXXX	XXX-XXX-XXXX		
Ron Smith	Quality Specialist	r.smith@air.com	xxx-xxx-xxxx	xxx-xxx-xxxx		
Tom Sunday	Technical Writer	t.sunday@air.com	XXX-XXX-XXXX	XXX-XXX-XXXX		
Karen Brown	Testing Specialist	k.brown@air.com	XXX-XXX-XXXX	xxx-xxx-xxxx		



3.2.4 Steering Committee

The Steering Committee (SteCo) of the project is responsible for seamless integration between the partners, as well as meeting financial regulation in USA and Kenya.

The SteCo consists of the following members:

Organization	Name	Comment
Kenya Commercial Bank (KCB)	Musa Juma	Ensure project meets bank risk assurance criteria.
Central Bank of Kenya (CBK)	Susan Mwangi	Compliance with Kenyan financial regulation
Financial Industry Regulatory Authority (FINRA)	Janet Jackson	Compliance with USA financial regulation
Visa	James Blue	Seamless integration with Visa money network



4. Schedule and Budget

4.1 Work Breakdown Structure

	F	Project	Lead	ership		Pr	oject '	Team N	/lembe	ers	ı	Projec	t Sub-	Teams	S	E	Externa	al Res	ources	,
Role Project Deliverable (or Activity)	Executive Sponsor	Project Sponsor	Steering Committee	Advisory Committee	Role #5	Project Manager	Tech Lead	Functional Lead	SME	Project Team Member	Developer	Administrative Support	Business Analyst	Role #4	Role #5	Consultant	РМО	Role #3	Role #4	Role #5
												,								
Initiate Phase Activities																				
- Submit Project Request	A/C	R/A				R/A	A/C	A/C	С											
- Request Review by PMO						R											Α			
- Research Solution	I	С				R/A	A/C	A/C	С				С			С	A/C			
- Develop Business Case	I	A/C	ı	ı		R/A	С	С	С				С			С	С			
Plan Phase Activities																				
- Create Project Charter	С	С				R/A	С	С	С				С			С				
- Create Schedule	I	I	I	I		R/A	С	С	С	С	С	С	С			С	ı			
- Create Additional Plans as required	I	I	I	I		R/A				I	ı	I	I			С	I			
Execute Phase Activities																				
- Build Deliverables	C/I	C/I	C/I	C/I			R/A	R/A	R/A	R/A	R/A					A/C				
- Create Status Report	I	I	I	I		R/A	R/A	R/A	R/A							С	I			
Control Phase Activities																				



- Perform Change Management		С	С	С	R	Α	Α	A	Α					С	ı		
Close Phase Activities																	
- Create Lessons Learned	С	С	С	С	R/A	С	С	С	С	С	С	С		С	С		
- Create Project Closure Report	I	I	I	I	R/A	I	I	ı	I	ı	I	I			I		

The above is the RACI Matrix.

RACI represents: <u>R</u> - Responsibility, <u>A</u> - Accountable, <u>C</u> - Consulted, and <u>I</u> - Informed

RACI Definitions:

<u>Responsibility</u> = person or role responsible for ensuring that the item is completed <u>Accountable</u> = person or role responsible for actually doing or completing the item <u>Consulted</u> = person or role whose subject matter expertise is required in order to complete the item <u>Informed</u> = person or role that needs to be kept informed of the status of item completion



4.2 Schedule and Milestones

A detailed Project Schedule is below. The Project Schedule is monthly updated by the Project Manager.

	Multicurrency Wallet Implementation	Effort Estimate in Days	Planned Start Date	Planned End Date	Resource
1	Initiate Project				
1.1	Develop Project Charter				
1.1.1	Define Scope	4.00	06/01/17	06/08/17	Name1, Core Team
1.1.2	Define Requirements	3.00	06/09/17	06/15/17	Name1, Core Team
1.1.3	Identify High-Level Roles	0.25	06/16/17	06/17/17	Name1
1.1.4	Develop High-Level Budget	1.00	06/16/17	06/20/17	Name1
1.1.5	Identify High-Level Control Strategies	0.50	06/21/17	06/21/17	Name1
1.1.6	Finalize Charter and Gain Approvals	2.00	06/21/17	06/30/17	Name1
1.1.6.1	Consolidate and Publish Project Charter	1.00	06/21/17	06/23/17	Name1
1.1.6.2	Hold Review Meeting	0.50	06/24/17	06/24/17	Name1
1.1.6.3	Revise Project charter	0.50	06/27/17	06/28/17	Name1
1.1.6.4	Gain approvals	0.50	06/29/17	06/30/17	Name1
2	Plan Project				
2.1	Develop Work Plan				
2.1.1	Develop Work Breakdown Structure	2.00	07/01/17	07/06/17	Name1
2.1.2	Develop Project Staffing Plan	2.00	07/07/17	07/11/17	Name1
2.1.3	Develop Project Schedule	3.00	07/12/17	07/14/17	Name1
2.1.4	Develop Project Budget	3.00	07/15/17	07/20/17	Name1
2.2	Develop Project Control Plan				
2.2.1	Develop Communication Plan	1.50	07/15/17	07/17/17	Name1
2.2.2	Develop Quality Management Plan	1.50	07/17/17	07/21/17	Name1
2.3	Finalize Project Plan and Gain Approvals	5.00	07/22/17	07/29/17	Name1
3	Execute and Control Project				
3.1	Design Framework				



5.00	08/01/17	00/45/47	
	00/01/17	08/15/17	Name1, core team
1.00	08/16/17	08/18/17	Name3, Name2
2.00	08/19/17	08/31/17	Name3
65.00	09/01/17	10/31/17	Name2
12.00	09/15/17	10/21/17	Name1, core team, review team
20.00	08/19/17	08/31/17	Name3, web developer
4.00	09/19/17	11/25/17	core team, review team
4.00	10/19/17	11/25/17	core team, review team
5.00	11/18/17	11/30/17	Name2, Name3
5.00	12/01/17	12/16/17	Name1
0.50	12/19/17	12/30/17	Name1
5.00	01/03/18	01/10/17	Name1, core team, review team
0.50	01/13/18	01/13/17	Name1, core team, review team
	2.00 65.00 12.00 20.00 4.00 4.00 5.00 5.00 5.00	2.00 08/19/17 65.00 09/01/17 12.00 09/15/17 20.00 08/19/17 4.00 09/19/17 4.00 10/19/17 5.00 11/18/17 5.00 12/01/17 0.50 12/19/17	2.00 08/19/17 08/31/17 65.00 09/01/17 10/31/17 12.00 09/15/17 10/21/17 20.00 08/19/17 08/31/17 4.00 09/19/17 11/25/17 4.00 10/19/17 11/25/17 5.00 11/18/17 11/30/17 5.00 12/01/17 12/16/17 0.50 12/19/17 12/30/17 5.00 01/03/18 01/10/17



The lifecycle is depicted below:

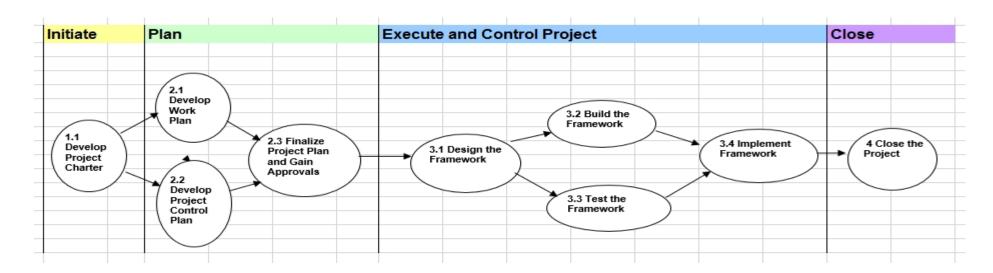


Figure 4.2: Software Lifecycle



The Gantt Chart representation is as follows:

		2017							2018
		June	July	August	Sept	Oct	Nov	Dec	Jan
1	Initiate Project								
1.1	Develop Project Charter		I						
2	Plan the Project								
2.1	Develop Work Plan								
2.2	Develop Project Control Plan								
2.3	Finalize Project Plan and Gain								
	Approvals								
3	Execute and Control								
3.1	Design Framework								
3.2	Build the Framework								
3.3	Test the Framework								
3.4	Implement Framework								
4	Close the Project								



4.3 Budget

The following is the distribution of the budget over the whole project life.

Category	Budget for Period in US \$						
Cutogoly	M0-M1	M1-M2	M2-M3	M3-M4	M4-M5	M5-M6	
Human Resources (internal)	1	1	1	1	1	1	
Human Resources (external)	1	1	1	1	1	1	
Purchases (COTS)	1	1	1	1	1	1	
Equipment	1	1	1	1	1	1	
Premises	1	1	1	1	1	1	
Tools	1	1	1	1	1	1	
Travel costs	1	1	1	1	1	1	
Training	1	1	1	1	1	1	
Review activities	1	1	1	1	1	1	
Other	1	1	1	1	1	1	
Total	10	10	10	10	10	10	
Total cumulated	1	2	4	9	11	12	

For a detailed list of costs of all resources see the Business Plan.

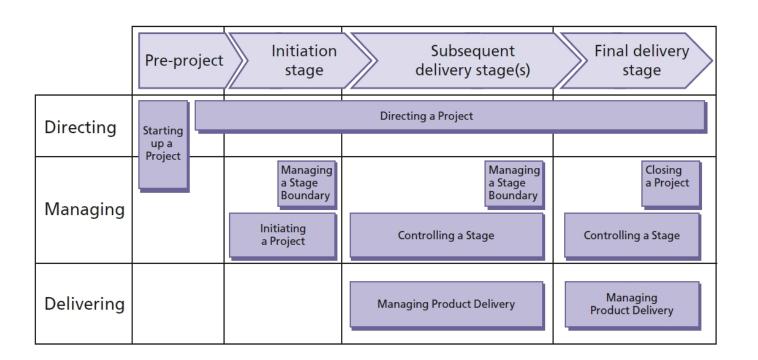
4.4 Development Process

An Agile development methodology as described in the company Organizational Development Process will be employed in this project. There will be a major iteration every 4 to 6 weeks, and deliverables every week.

A control group of users will be used to give appropriate feedback to the development team.

Select methodologies from Prince2 will also be applied.





4.5 Development Environment

These are the methods, tools, languages, etc. to be employed for design, implementation, test, and documentation, and when they (or knowledge) should be available.



Item	Applied for	Availability by
Methods		
Use Case	Requirements capturing	M0
Tools		
Rational Rose	Design	M2
Languages		
UML	Design	M2
Java	Backend	M2
AngularJS	Web interface	M2

4.6 Measurements Program

Here is the project specific data should be collected to assess the achievement of the project goals.

Type of data	Purpose	Responsible
<# changed requirements>	To determine whether they can fit in the time budget	Q-Responsible
<# defects found before M4>	To assess the readiness of the software for production	Q-Responsible
<performance data=""></performance>	to assess the achievement of project requirements	Test lead



5. Risk Management

All identified risks are documented, assessed and prioritized in the Risk Management Plan 0 by the Project manager. The plan also defines the mitigation and contingency measures and who is responsible for. The Risk Management Plan is updated monthly or on event and communicated to all affected stakeholders by the Project Manager. The risk status is reported to the line management in the monthly Project Report.

6. Sub-contract Management

Sub-	contractor	Sub-contracted Work	Ref. to sub-contract	
Company	Contact			

For further details, refer to the sub-contractor agreements.

7. Communication and Reporting

Type of Communication	Method / Tool	Frequency /Schedule	Information	Participants				
Internal Commun	Internal Communication:							
Project Meetings	Teleconference	Weekly and on event	Project status, problems, risks, changed requirements	Project Mgr Project Team				
Sharing of project data	Shared Project Server	When available	All project documentation and reports	Project Mgr(s) Project Team Members				
Milestone Meetings	Teleconference	Before milestones	Project status (progress)	Project Mgr Sub-project Mgr				
Final Project Meeting	Teleconference	M6	Wrap-up Experiences	Project Mgr Project Team				
External Commun	nication and Repo	rting:						
Project Report	Excel sheet	Monthly	Project status - progress - forecast - risks	Project Manager Sub-Project Managers				
SteCo Meetings	Teleconference	Monthly		Project Manager, SteCo				



8. Delivery Plan

8.1 Deliverables and Receivers

ldent.	Deliverable	Planned Date	Receiver
D1	Secure Visa Payment Module	M3	App Development Team
D2	Kenya Bank VPN	M2	Sys Admin
D3	Operation Manuals	M5	Customer Care Team

9. Quality Assurance

A staging server will be available. It will contain a replica of the production code. Code changes will be staged here and regression tests will be carried out before code is approved for pushing to production.

The above will be managed by the TeamCity server. Human based UAT will be conducted weekly. Software developers will alternate in UAT.

10. Configuration and Change Management

Major changes that can cause the project delivery schedule to be delayed by more than a week will have to be captured in a Change Request Form. The report must receive approval from senior management before the changes are incorporated.

Our System Administration department will be responsible for performance tuning, scheduled backup and general uptime of the hardware and network environment.

11. Security Aspects

The system must comply with security of PCI DSS Level 4.

An external Intrusion Detection System (IDS) will be used to detect for any compromise. All incidents are to be logged and investigated.

The system must meet all standards as stated in the company's software security policy. Security agreements will be drawn up for external partners and suppliers of the project. A special security committee will be in place during implementation, and will report observations to the Steering Committee.



12. Abbreviations and Definitions

CCB Change Control Board

CI Configuration Item

CM Configuration Management
COTS Commercial Off-The-Shelf

CR Change Request

CRM Change Request Management

ID Identification, IdentifierIP Intellectual PropertyQA Quality AssuranceSteCo Steering Committee

V&V Verification and Validation

13. References

The following is a list of documents that this document refers to.

<Doc. No.> Project Proposal for Airbnb Multicurrency Wallet

<Doc. No.> Project Requirements Specification for Airbnb Multicurrency Wallet

<Doc. No.> Implementation Proposal for Airbnb Multicurrency Wallet

<Doc. No.> Project Schedule for Airbnb Multicurrency Wallet

<Doc. No.> Risk Management Plan for Airbnb Multicurrency Wallet

<Doc. No.> Work Breakdown Structure for Airbnb Multicurrency Wallet

<Doc. No.> Quality Assurance Plan

<Doc. No.> Configuration Management Plan

<Doc. No.> <Sub-contract #1>

14. Revision

Rev. ind.	Page (P) Chapt. (C)	Description	Date Dept./Init.
-		original version	Apr 2017