

# Kenneth Looi

Sample Projects

&

End to end product design process overview / checklist

# Barclays Capital 'Request'

Request is a browser-based automated software & hardware provisioning system as well as an internal AIM (access and identity management) tool for the bank.

## **Project Deliverable**

Design & implement a new internal bank-wide infrastructural system that will replace an internal legacy system and that will automate the process of provisioning new joiners or existing staff with appropriate software, hardware or specific service requests.

## **Outcome**

A web-based system was designed, implemented and refined throughout a 2 year process. A complete and successful overhaul of the existing legacy system took place and 'Request', the new system became the defacto system for raising requests (software, hardware, other services) within Barclays Capital.

## **Benefit**

Previously manual, repetitive and laborious processes were now streamlined and automated. 'Packages' could be set up for specific types of new joiners (new employees) and such packages could be deployed automatically within a few steps. Workload for teams previously working on manual tasks associated with the old system was free-ed up tremendously and the time it took for a service to be deployed to the end-user took considerably much less time.

# Barclays Capital 'Request'

Request > a browser-based automated software & hardware provisioning system + an internal AIM (access and identity management) tool

## Project Deliverable

Design & implement a new internal bank-wide infrastructural system that will replace an internal legacy system and that will automate the process of provisioning new joiners or existing staff with appropriate software, hardware or specific service requests.

## Initiative

- Speak with various stakeholders / conference calls with SMEs, find out what challenges lay ahead, pain points of existing processes
- Design/Build new system + clean interface that satisfied all requirements

## Main challenges were:

- Old system / approach was 80% manual, no documentation
- How do we go about automating age-old processes?
- Educating / Informing users about the new system / Slowly phasing in / Gaining acceptance

**Request**  
Your One Stop Portal for Requests

**About Request**  
Request provides a single user interface for users to request and receive products and services. It features a consolidated catalogue and utilizes a shopping cart feature to enhance the user experience.

**Request - An Overview**

To Track a Request, Enter the Request ID

To Raise a new Request, Start by searching the Catalogue for Items to add to the Cart.

The number of Items in your cart is shown here. Clicking it opens the cart.

**Main Features of Request**

- Consolidated Catalogue of products from various systems
- Shopping cart functionality (make requests for multiple users for multiple products)
- A console with consolidated details of all requests raised for you
- The ability to track the progress of every request via a graphical legend
- Minimize support calls to the Help Desk with the simple design
- Blackberry Approvals (Sept. 09 release)
- Self service for users to reset passwords

<http://request>

# Barclays Capital 'Request'

## Outcome

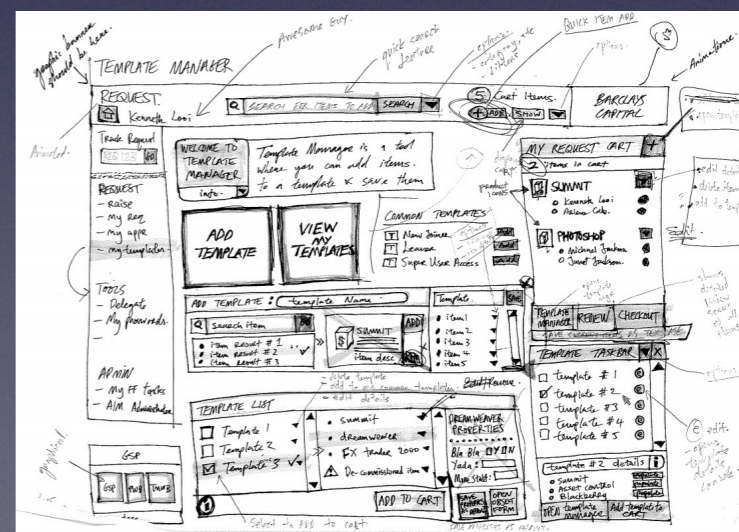
A web-based system was designed, implemented and refined throughout a 2 year process.

A complete and successful overhaul of the existing legacy system took place and 'Request', the new system became the defacto system for raising requests (software, hardware, other services) within Barclays Capital.

A promotional video and interactive system training guide was created.

## Benefit

- Previously manual, repetitive and laborious processes were now streamlined and automated. Enormous time / cost savings.
- 'Packages' could be set up for specific types of new joiners (new employees) and such packages could be deployed automatically within a few steps.
- Workload for teams previously working on manual tasks associated with the old system was freed up tremendously via system as well as UI innovations
- Time it took for a service to be deployed to the end-user from initial request stage took considerably much less time.
- Approval process was simplified, with automatic reminders, etc.





# Barclays Capital 'Request'

The screenshot displays the Barclays Capital 'Request' portal. At the top, the user is logged in as Albert McKenna, with a shopping cart containing 0 items. The main navigation includes 'Track a Request' and 'Raise a Request'. The 'Raise a Request' section features a search bar with the term 'Summit' and a location filter set to 'Barclays Capital > AMER > 70 Hudson'. Below the search bar, there are search results for 'Summit', including 'Summit Privileged Additional Functions (New Request)', 'Summit (New Request)', and 'Summit (Amendment)'. Each result includes a product description and an 'Add to Cart' button. A 'CopyBox (New!)' feature is also visible, allowing users to drag data objects into a temporary holding space. The interface is clean and professional, with a blue and white color scheme.

**Request**

Logged in as : Albert McKenna 0 Items in Cart [New to Request? Visit Our Help Portal](#) [Sign Out](#) **BARCLAYS CAPITAL**

**Track a Request**

Enter Request No. [Advanced Search](#) [Go](#)

**Raise a Request**

Search: Summit All these terms [Search](#)

Location: Barclays Capital > AMER > 70 Hudson [Browse Catalogue](#) [Simple](#)

**Your cart : 0 items**

Your Cart is Currently Empty.  
To Request for an Item,  
Begin by Searching for the Item.

**Search Tips**

Can't find what you're looking for?

You can try :

- Using Different Keywords
- Using Fewer Keywords
- Browsing the Catalogue

Still can't find your item?  
Let us know how we can improve.

**CopyBox (New!)**

CopyBox lets you drag data objects (like Request Items) into a temporary holding space. You can then drag these objects back into forms or any other CopyBox enabled interspace.

**How do I use it?**  
Simply click and drag any data object into the Copy area. Re-drag the object into a form, or onto an action-spot. The form is then automatically populated with the object's data-set. Alternatively, actions are executed with the object's pre-set attributes. No more manual population! Well, less.

Applications and General Services (25)

Email Distribution Lists (8)

LDAP Groups (7)

# Wealth Management iPhone App For A Leading Swiss Bank

AdNovum is a high precision Swiss Software House that specialises in bespoke software for the banking / financial services stream

While working there, I used my knowledge of consumer and private banking (high net worth customer segment) online banking related features to prototype a proprietary mobile banking solution that could be customised for banks.

## Project Deliverable

Analyse competitor online banking solutions and extract product features, including innovations of your own, to create a proprietary online banking solution that can be skinned for any bank customer.

## Initiative

- Researched the market, mapped out competitor online banking functions into a comprehensive matrix
- Followed FinTech Blogs, Finovate Scene, Attended Conferences, Speculated about Industry Predictions
- Had multiple one on one sessions with SMEs, general industry networking



# Wealth Management iPhone App For A Leading Swiss Bank

## **Outcome**

Through research it was determined that whilst retail banking functionality throughout the industry was mostly up to date, several wealth management specific features for the investor / trader segment were not yet as explored / developed.

A series of screen designs regarding specific functions and detailing user interaction as well as a list of functions that could be implemented in addition to an existing online banking product suite was the final output.

## **Benefit**

Banks or financial institutions, potential customers of AdNovum, could now request specific online banking features for implementation or take up the entire suite / solution. We showcased successfully with much interest / traffic at a FinTech event at Marina Bay Sands Singapore.

# Wealth Management iPhone App For A Leading Swiss Bank



**PORTFOLIO - JOHN DOE**

Cash Accounts	\$15,000.00
Short Term Investments	\$25,000.00
Bonds	\$0.00
Mutual Funds	\$0.00
Equities	\$12,500.00
Portfolio Investments	\$50,000.00
Real Estate	\$2,600,000.00
Others	\$0.00
<b>TOTAL</b>	<b>\$2,812,000.00</b>

Liquid Assets

Accounts Portfolios Trade Wallet More

Positions Feed Order Done

Apr'12 Jul'12

12:15pm Japan's Nikkei 225 hits four week high ECB Bond Plan >>

### Features

- Full Suite of Personal Banking Functionality
- Finance Overview (Accounts, Portfolios)
- Credit Card Management
- E-Billing / Invoicing using Code Scanner (iPhone Camera)
- Full Market Data Access (Equities, Bonds, Forex, etc)
- Instruments View / Charting for Stocks
- Access to Bank Products
- Securities Trading
- Order, Buy & Sell Position Capability
- Intraday Valuations
- Portfolio Notifications
- Forex calculator and more

# DBS Market Watch iPad App

DBS Market Watch is an app that allows DBS Private Banking customers to watch the performance of stocks and assets and pre-program smart trades which can be triggered by specific market outcomes instantaneously.

## **Project Deliverable**

Design an iPad app that shows realtime stock information in a graphical manner for users to make better informed financial decisions.

## **Initiative**

Research was conducted with industry SMEs & conversations were had with actual traders.

I watched traders trade, observed process and asked to be taught to trade.

Experimented with low volume trading on my own to get feel of process.

## **Outcome**

Through research and conversation it was observed that lag time was a main cause of monetary losses. Traders and investors act on market triggers. The time it takes to log in, set up a trade and execute the order (along with all the selection of accounts, key-ing in of values, setting destination accounts for fund transfers, etc) from the precise moment of market condition change is simply too long and manual. If investors could pre-program orders, values, instructions and be able to execute these immediately based on a market trigger, it would save invaluable time. Current traders/investors were losing money as the market had already turned by the time the order was finally inputted and executed.

# DBS Market Watch iPad App

## **Outcome (continued...)**

An iPad app was prototyped that displayed real-time selected stock info (customisable) in a linear progressive chart with visually appealing up/down stock price tickers, a horizontal news scroller (using info from a feed), a detail view section which included the preset batch execution function / solution.

## **Benefit**

Real time trading related information customised for the trader/investor's portfolio could be accessed on the go. This includes ability to execute orders on the go.

Market conditions, news, fluctuations relevant to the investor could all be seen in a single, appealing screen. The iPad could be placed at the side of a desk whilst working, etc.

Potential losses due to 'market trigger to order execution' lag time could be averted.

Stress and frantic actions commonly experienced when a market turns could be lowered with pre-thought out strategies and batch commands ready to go at the hit of a button.



Market Watch

4:20 PM

DBS PRIVATE BANK

DJI Dow Jones IBCX S&P 500 NASDAQ

0.25%  
0.00%  
-0.25%  
-0.50%  
-0.75%  
-1.00%

GAN, GOLDMAN PROFITS RISE SHARPLY RIO TINTO CEO STEPS DOWN GLOBAL REGULATORS DOWN DREAMLINERS U.S STOCK FUTURES FALL GOLDMAN EARNINGS SOAR TO 2.8

296.69	+2.54	BARC	192.59	-0.09	IBM
506.09	+20.17	AAPL	34.64	-0.06	ORCL
12.61	-0.56	DELL	18.69	-0.31	REA
296.69	+2.54	BARC	192.59	-0.09	IBM
506.09	+20.17	AAPL	34.64	-0.06	ORCL
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12.61	-0.56	DELL	18.69	-0.31	REA
296.69	+2.54	BARC	192.59	-0.09	IBM

295.80 -0.25 (-0.08%)

BARC Barclays PLC

Customize Orders Trade Exit

# SCB Private Banking iPad App

Standard Chartered Bank has a customer segment called Private Bank which has a separate visual identity and exclusivity. This app focuses on servicing the needs of this customer segment.

## Project Deliverable

Design an iPad app for SCB's high net worth customer segment which has a separate visual identity from the normal customer base. Work with Standard Chartered BAs to incorporate Private Bank specific features and functionality.

## Initiative

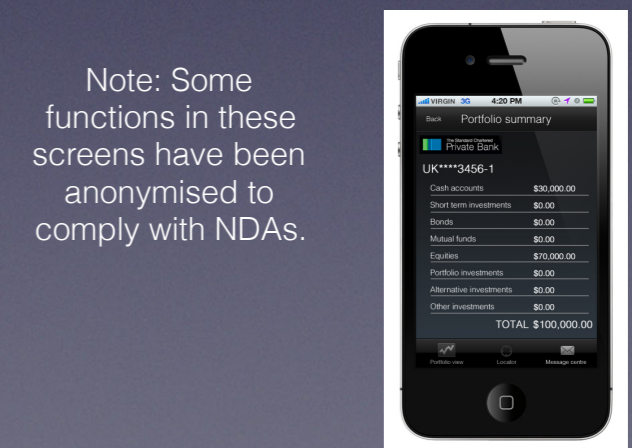
Research was conducted with the assistance of a 3rd party SME. It was concluded that the bank needed an online experience for Private Banking customers that provided a similar branch experience with an actual private banker but in a digital and mobile manner. Such a solution would augment the existing Private Banking experience.

## Outcome

A set of mobile & tablet screen designs were accomplished through collaboration with the product and BA team. We achieved satisfactory visual outcome in terms of visual identity goals with visual elements obtaining sign-off from corporate communications.

## Benefit

The bank could now implement a solution specifically for their private banking customer segment which was available only exclusively for them. The app would provide information that a private banker would normally have provided.



Note: Some functions in these screens have been anonymised to comply with NDAs.

# General Project Phases

- Goals & Planning
- Design
- Development
- Launch / Marketing
- Post Launch
- Expansion / Improvement

# Phase: Goals / Planning

- Best practice: Ask the right questions
  - Why is the app / solution needed?
  - What is it intended to address?
  - How can we delight customers through a compelling mobile experience?
  - What are our goals?
  - How can the app attract more customers?
  - How can the app increase customer usage?
  - How can the app extend an existing campaign?

# Sample Goals

- Extend existing campaign to connect with mobile customers
- Improve customer loyalty through daily / more frequent app usage
- Conjure and deliver new customer experiences possible only with mobile technology
- Stay ahead of competitors

I find it helpful to focus on a short list of main goals.

# Goal Refinement

- What problem should the app solve?
- What do our customers value?
- What competing apps are there?
- What is the target market?
- How will people find out about the app?
- What content should go into the app?

I find that the more good questions are asked, the better our understanding gets and the easier it is to design a solution that works / excels.

# Project Pre-Start Checklist

- Capture Key Goals & Publicise them on Project Wall
- Know the customer (target audience, ideal users, user's platform statistics, etc)
- Document business and technical assumptions (publish on project wall, either virtual realtime board, wiki or IRL wall)
- Review launch process
- Review budget and team selection approach (in-house, freelance, offshore, etc)
- Assemble Team, Kick Off
- Go through and reach conclusion on high-level timelines / launch milestones

A checklist helps me to capture anything that I might have missed.

# Phase: Design

- Information Architecture
- User Interface
- Visual Design

# Phase: Design > IA

- Information Architecture
  - Card Sort, Rank and organise content or functionality into categories or screens, Establish Info and Navigation Hierarchy
  - Identify main user stories, Determine step by step flows for these customer journeys. Map them out visually.
  - Make the most important info the most visible and accessible via the least number of micro-interactions ('taps' or 'swipes' for instance).
  - Define user actions and action\_names such as: 'Edit', 'View Spendings', 'Manage Account'
  - Choose navigation pattern based on info we have acquired so far

# Phase: Design > UI

- User Interface
  - Keep user's primary goals in mind when designing app or mobile channel
  - Design for touch, 3D touch, ensure elements are appropriately sized (size, colour and interaction experimentation tests)
  - Follow platform specific conventions as general rule although a little deviation is ok if innovative and creative

# Phase: Design > Visual Design

- Visual Design
  - Complement existing branding
  - Delight users with visually rich interfaces
  - Consider all elements of visual design. Shape, tone, texture, etc.
  - Work with visual designer to ensure brand identity guidelines are met and app objectives are met. Fine-tune visual design.
  - Ensure overall look & feel of app is exceeds expectations quality wise. Everything has to be precise and alignment pixel perfect / mathematically congruent.

# Phase: Development

- Reduce project risk: Prove key concepts early (fail early / often), stay involved throughout process.
- Clarify integration matters as early as possible: API limitations, 3rd party services to be used, server side functionality and limitations, licensing costs, etc.
- Perform inter-department checks to ensure app / mobile solution meets regulatory or organisational requirements (privacy controls, encryption standards, etc)
- Integrate analytics for usage monitoring purposes, to analyse conversion paths, etc.
- Maintain momentum with iterative development: Weekly sprints, progress updates, regular demos or beta versions.
- Thoroughly test app on a variety of devices and OS versions (usually with help from a testing team or dedicated testing software).
- Allow time for optimisation, pixel pushing, bug fixing and special improvements / additions.
- User test: Get objective feedback from potential users outside of organisation.

# Phase: Launch / Marketing

- Pre-Launch:
  - Plan a promotion calendar leading up to launch day
  - Keep excitement going with pre-launch promotions (Sneak peeks, teaser videos, mailing list)
  - Decide on good keywords for SEO purposes or for app store submissions
  - Press Release + Teaser Video
  - Create landing page for app + updates corner
  - Consider mobile advertising, print, television and email marketing services
  - Engage users via social media channels to drive downloads, inform
  - Reach out to reviewers / tech-zines / industry publications, etc

# Phase: Launch / Marketing

- Launch Day:
  - Update landing page / blog
  - Notify and inform all staff of product launch, prepare product launch info-kit incase public asks staff members about the digital product
  - Email existing customers, partners, notify via social media (use social media contests / special promo-codes / promotions / other marketing methods)
  - Send press-kit (press release, screenshots, app icons, logos, colour guides, URL, etc) to press

# Phase: Post-Launch

- Keep promoting / marketing the app even after launch
- Monitor analytics / rankings
- Review all incoming feedback
- Acknowledge all customer feedback as timely as possible
- Politely engage feedback submitters, extract useful info
- Review app improvements / suggestions

# Phase: Expansion / Improvement

- Expand successful app to more devices, platforms, users
- Update app to take advantage of new technologies / changing marketplaces
- Run cross promotions w/ related apps or products
- Possible multi-language support, etc