



RISKFLOW

ASSET & LIABILITY MANAGEMENT

# **Building an Android Application with an APL Computational Engine**

## **INTRODUCTION**

**Illse Nell – CEO, Riskflow Technologies**

## **TECHNICAL PRESENTATION**

**Danie Maré – Head Developer, APL solutions**



# INTRODUCTION

- **Who is Riskflow**
- **APL at Riskflow Technologies**
- **The Cashflow Optimizer App**
- **The future**





# Who is Riskflow?



**Riskflow Technologies**



**Riskflow Institute**



**Riskflow Enterprise Development**



# APL at Riskflow Technologies

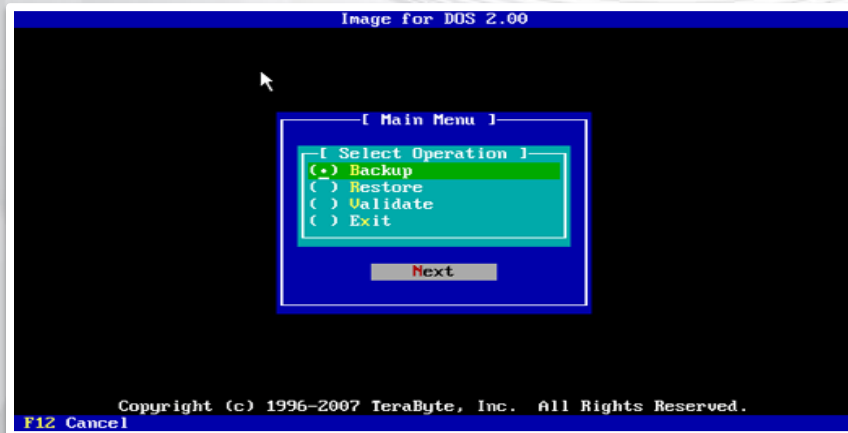
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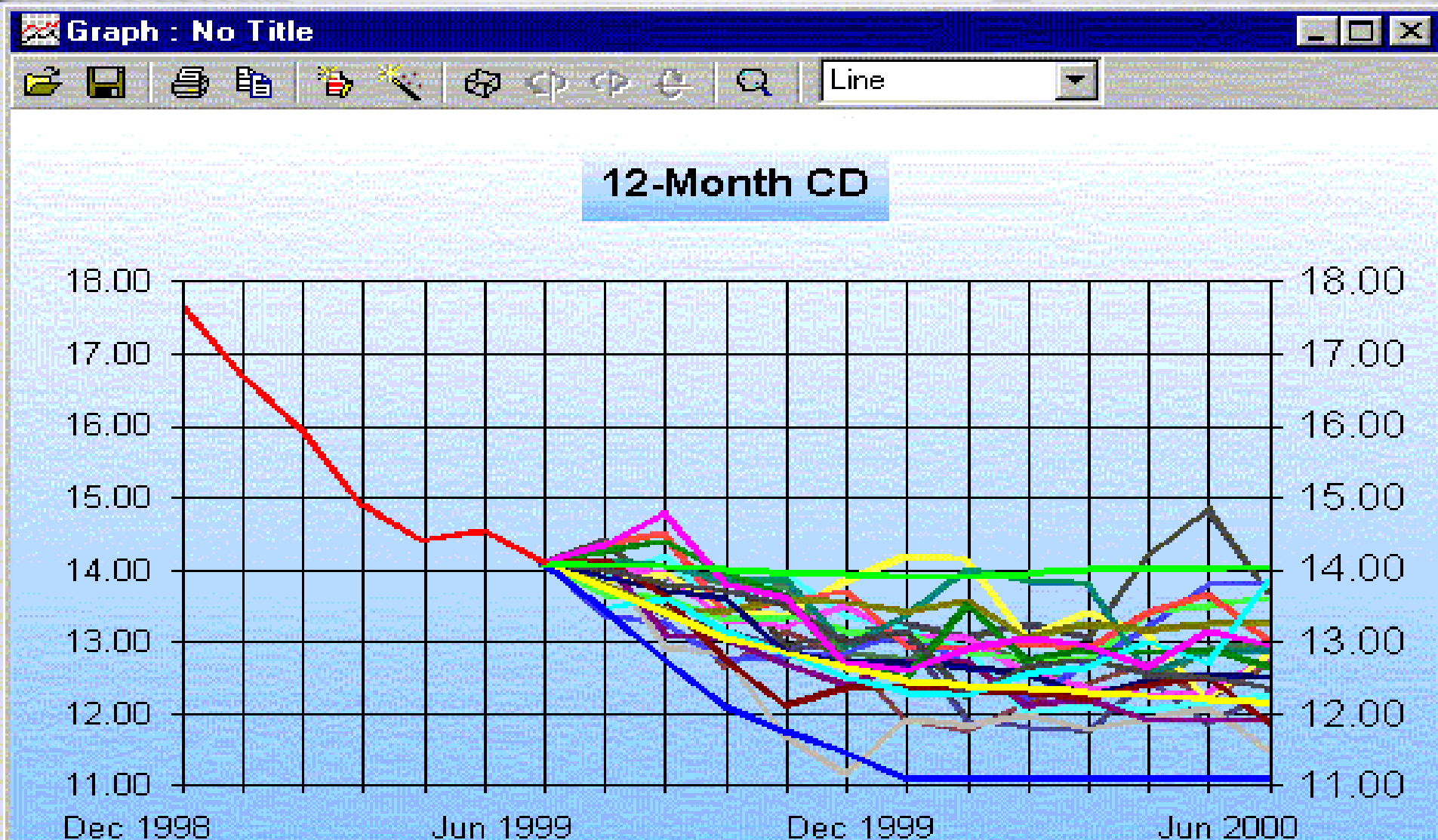


# APL at Riskflow Technologies



# APL at Riskflow Technologies

## IFS – Interest rate Forecasting System





# APL at Riskflow Technologies

## ALMAN – Asset & Liability Management

Aim: To assist financial institutions

TO MINIMISE RISKS

TO MAXIMISE PROFIT (NII)

TO ATTAIN STRATEGIC GOALS

- MARKET SHARE
- NEW PRODUCTS
- PROFIT GOALS





# Cashflow Optimizer App

“Cash flow management is fundamental to business success. Cash flow management means financial literacy—the ability to read and make sense of financial statements. Many small-business owners go under because they can’t tell the difference between profit and cash flow. Profit may be phantom cash flow. Actual cash flow is to a business what blood is to the human body.”

– *Robert T. Kiyosaki, Rich Dad Poor Dad*



# Cashflow Optimizer App

## AIM

A tool to make Cashflow Management accessible to everyone

Answers to simple questions such as:

- Can I afford the car / house of my dreams?
- Where / How should I invest my money: Shares, Unit trusts, Fixed deposits?
- How much cash will I have next December?



# Cashflow Optimizer App

Answers to sophisticated questions such as:

- Which form of financing is best for my business?



- What is my business worth?



- How will my cashflow be impacted if I give my employees a bonus?





# Cashflow Optimizer App

Allows you to draw up your financial statements (Balance Sheet, Income & Cashflow statement)

NOT ONLY FOR YOUR CURRENT POSITION,  
BUT FORECASTED INTO ANY FUTURE PERIOD

Twelve Month Income Statement Total Location/Total Department For the Twelve Months Ending December 31, 2008 in USD As of 05/15/2009 15:55:02													
	January	February	March	April	May	June	July	August	September	October	November	December	Total Month
Non-professional Charges	814,908	558,804	621,235	716,412	969,211	816,957	1,064,270	890,157	930,396	1,139,237	943,610	1,430,601	10,895,799
Legal Fees Income	36,062,701	32,622,452	30,182,870	32,280,288	44,808,503	46,295,757	61,124,033	64,966,380	46,053,462	56,626,008	58,657,693	91,456,772	601,126,920
<b>Collections</b>	36,877,609	33,181,257	30,804,104	32,996,701	45,777,714	47,102,714	62,188,303	65,856,537	46,983,858	57,765,246	59,601,303	92,887,373	612,022,718
<b>Revenues</b>	36,877,609	33,181,257	30,804,104	32,996,701	45,777,714	47,102,714	62,188,303	65,856,537	46,983,858	57,765,246	59,601,303	92,887,373	612,022,718
NEED-02 Other Income/Expense	3,183	(20,541)	56,938	(25,822)	(61,037)	1,717	(3,761,235)	(19,774)	(6,794)	723	(22,386)	38,578	(2,760,148)
NEED-01 Charitable contributions	79,464	152,939	199,569	183,846	137,124	73,813	28,415	151,676	208,267	104,906	366,781	89,734	1,776,433
NEED-00 Interest Expense	68,153	194,234	69,504	105,947	204,683	106,300	86,365	101,253	3,745	107,530	113,200	(10,491)	1,150,423
<b>Non-operating Expenses</b>	150,800	326,633	326,010	260,970	300,771	181,830	(3,667,155)	234,056	205,219	213,159	456,596	177,821	(833,291)
Depreciation/Amortization	920,019	806,601	868,489	879,928	967,616	(51,167)	781,328	785,299	821,964	884,913	969,163	1,230,903	9,865,076
Insurance	1,191	2,445	11,640	2,641	34,410	1,130,519	(230,796)	8,109	186,834	6,533,424	(61,357)	244,086	7,863,142
Business Taxes	728	749	674	25,919	710	2,148,652	20,176	96,293	2,149,131	(1,337)	1,077	5,205,513	9,648,486
Outside Paralegals	25,563	21,280	19,962	26,448	12,997	20,863	6,837	13,751	20,326	23,015	4,943	7,177	203,162
Office Operating/Other Costs	1,005,642	760,002	1,482,993	1,058,944	845,031	1,267,022	1,223,032	980,089	932,882	1,215,627	979,961	1,117,591	12,888,816
Professional Services	102,765	95,968	177,808	139,368	229,350	352,020	222,524	321,867	82,970	369,413	98,253	458,071	2,650,357
Information Systems	347,634	551,789	58,494	162,761	109,447	593,935	301,882	195,277	233,150	282,003	91,727	215,229	3,142,328
Non-Partner Non-US office cost	166,221	517,597	587,122	611,415	402,606	367,510	537,340	632,907	570,417	539,560	231,770	1,029,013	6,093,479
Business Development	136,036	224,749	171,472	151,303	92,743	204,768	257,469	48,950	120,214	186,907	182,950	182,939	1,969,420
Professional Activities	84,739	80,557	154,559	115,759	59,824	114,836	72,964	91,303	123,105	(379,975)	184,291	265,504	966,236
Legal recruiting/Training	342,135	437,348	703,747	391,933	765,248	741,029	758,928	478,319	687,019	598,709	701,026	629,887	7,235,251
Library	293,325	601,245	627,791	598,727	497,349	634,191	786,880	559,660	315,243	1,051,331	696,625	1,406,797	8,069,165
Communication	271,899	242,361	435,337	344,074	468,667	461,001	306,358	263,432	378,255	274,437	362,707	662,415	4,460,742
Occupancy	121,750	2,962,187	4,716,059	3,216,458	3,284,774	5,044,891	6,245,401	3,506,910	5,045,117	3,270,236	3,169,569	10,937,451	51,519,793
Fringe Benefits	965,998	1,962,922	1,758,686	1,865,444	1,861,283	1,687,206	1,642,886	1,420,560	1,327,376	1,972,246	1,726,582	8,141,337	26,362,522
Salaries	11,377,755	13,304,290	12,058,052	11,863,981	13,885,405	13,329,131	12,630,237	12,036,911	11,780,940	12,867,839	22,084,668	33,076,020	180,294,229
Client Disbursement Write-Offs	(42,409)	(111,730)	(83,064)	(73,860)	(102,157)	(206,758)	(161,581)	(151,736)	(345,692)	(70,788)	(178,505)	(368,505)	(1,887,251)
<b>Operating Expenses</b>	16,139,991	22,460,151	23,750,058	21,281,244	23,433,101	27,859,677	25,401,783	21,285,891	24,429,253	29,617,561	31,235,363	64,450,877	331,344,951
<b>Expenses</b>	16,290,791	22,786,784	24,076,068	21,542,214	23,733,872	28,041,507	21,734,629	21,519,946	24,634,472	29,830,720	31,691,959	64,629,696	330,511,660
<b>Net Income</b>	53,168,400	55,968,041	54,880,173	54,538,915	69,511,586	75,144,220	83,922,931	87,376,483	71,618,330	87,896,966	91,293,262	157,516,071	942,534,378

Enables you to distribute this information





# Cashflow Optimizer App

## Target Market

- Individuals & SMEs
- Educational organizations



# Cashflow Optimizer App

## Business Model:

Supply software to organizations with large client bases and then let them offer the App as a value-add.

This strategy will allow an organization to assess the financial soundness of their clients, helping the organization with ...



A photograph of a stone building facade. A rectangular sign with a decorative border is mounted on the wall. The sign has the word "BANK" written in large, bold, black capital letters. The background of the sign is a light, textured material. The building's stone is a warm, light brown color. To the right, a window is partially visible. In the foreground, there are stone steps leading up to the building.

**BANK**

- **Affordability**
  - **Sustainable**
  - **Credit Lending**
  - **Savings**
  - **Financial Plans**
  - **Variance**
- Analysis**



# THE FUTURE OF APL AT RISKFLOW

Expand the App allowing for more sophisticated calculations

**WHAT PART  
OF**

$$F_b = \iiint_V \beta_p \, dv + \iiint_V [\ddot{R} + [2\omega \times v_{xyz}] + [\dot{\omega} \times r] + \omega \times (\omega \times r)] \rho \, dv =$$

$$\iint_S v_{xyz} [\rho v_{xyz} \cdot dA] + \frac{\partial}{\partial t_{xyz}} \iiint_V v_{xyz} |\rho \, dv|$$

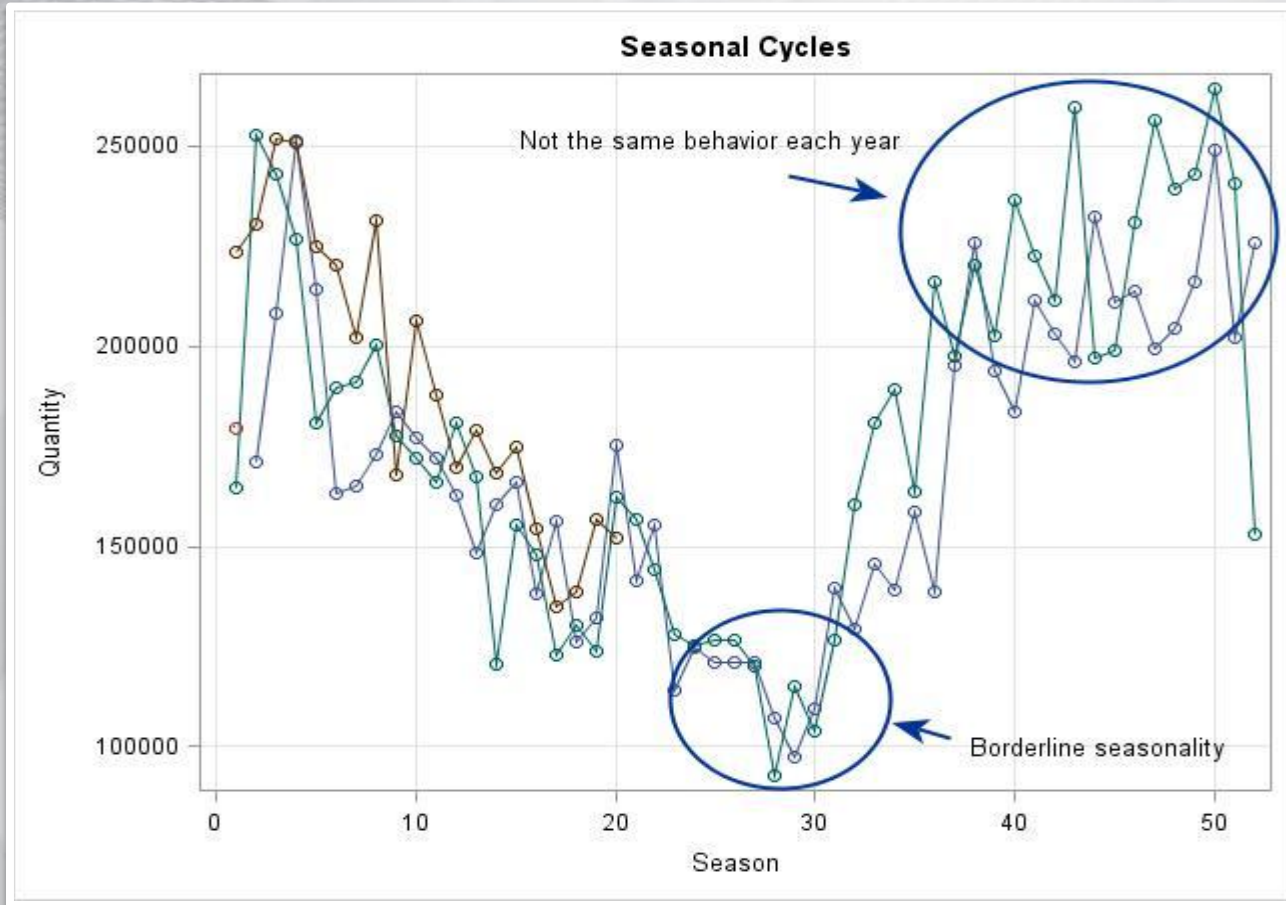
**DON'T YOU  
UNDERSTAND?**



RISKFLOW



# THE FUTURE OF APL AT RISKFLOW



Completely rewrite IFS (as cloud application) with new statistical forecasting techniques



# THE FUTURE OF APL AT RISKFLOW

Take ALMAN to the cloud

Thursday, 20 September, 2012

## ALMAN V6

Asset Liability Management 6.2.0

File Define Importing Management Decisions Run Maintenance Registration Tools Help Exit

**Reports**

- Financials
  - Opening Balance Sheet
- Budgetary
  - Balance Sheet
  - Average Balance Sheet
- Valuation
  - Income Statement
- Regulatory
  - Cash Flow
- Basel II/Risk
  - Treasury Report
- Miscellaneous
- Tools

**Product Information**

- ALMAN 6
- Released Notes
- Version 6
- Latest Upgrades
- What's changed

  
**RISKFLOW**  
TECHNOLOGIES

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**Did you know?**

Riskflow has included a new product type in version 5. This will be of most use to those clients who invest in government bonds/notes. The new "Treasury Notes" groups notes by "Ex-interest", "coupon frequency" and "valuation method". The coupon rates will appear in the same format as term splits. We have also upgraded the general display for forecast rates to accommodate the viewing of products with terms.





# Gaming – Serious Play

The **GAME** of **LIFE**

**How to play:**

Click the spin button to advance through the Financial stages of life.

Plan wisely and watch your savings grow!

**Quick access:**

Financial Stages:  
1 2 3 4  
5 6 7

Unexpected Expenses:  
a b c

2

3

4

5

6

7

Spin!

Savings:  
\$0,000,000

# Managing Tomorrow's Cash Flow Risks Today!

**THANK YOU**



**RISKFLOW**

**ASSET & LIABILITY MANAGEMENT**