SFU VentureLabs[®] Happiness is Positive Cash Flow **Preparing Proforma Financial Statements** By Mike Volker (mikevolker.com) 23 June 2020 WUTIF® **Angel Capital Innovation Fund**

Reporting vs Forecasting

- Reporting: What happened?
 - -factual information
 - -basic accounting
 - -reporting based on accepted standards (GAAP, ASPE, IFRS)
- Forecasting: What will happen?

 -estimating (guesstimating) or planning?
 -based on practical experience
 -assumptions are key!

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Why do Companies Fail?

They run out of money!

i.e. mismanagement of cash flow







Example: Y-T-D Actual vs Budget (Plan)

| Board Report Financials | (| | | | | | | | | | | | | |
|--------------------------------|----------|---------|----------|---------|----------|---------|----------|---------|-----------|---------|-----------|---------|-----------|-----------|
| | осто | JBER | SEPTEN | MBER | AUG | UST | JUL | LY | JUN | NE | MA | AY | YTD | 2018 |
| | Actual | Budget | Actual | Budget | Actual | Budget | Actual | Budget | Actual | Budget | Actual | Budget | Actual | Budget |
| Net Sales | 82,866 | 145,430 | 108,628 | 134,947 | 129,510 | 128,703 | 101,064 | 135,597 | 129,756 | 162,683 | 115,471 | 150,821 | 1,115,221 | 1,333,619 |
| COGS | 61,176 | 82,043 | 64,410 | 64,591 | 116,875 | 61,801 | 51,308 | 65,159 | 58,433 | 77,846 | 53,096 | 72,071 | 626,609 | 652,125 |
| Contribution | 21,690 | 63,387 | 44,218 | 70,356 | 12,635 | 66,902 | 49,756 | 70,438 | 71,323 | 84,837 | 62,375 | 78,750 | 488,612 | 681,494 |
| Margin | 26% | 44% | 41% | 52% | 10% | 52% | 49% | 52% | 55% | 52% | 54% | 52% | 44% | 51% |
| Overheads | 53,478 | 45,110 | 50,634 | 43,472 | 47,842 | 44,054 | 36,707 | 44,947 | 41,442 | 50,048 | 40,307 | 48,508 | 451,525 | 470,500 |
| Other Exp/Recoveries | (56) | (665) | (4,552) | (673) | (1,399) | (681) | 12,601 | (689) | 23,820 | (1,352) | (1,139) | (1,382) | 21,564 | (11,006) |
| Net Income | (31,844) | 17,612 | | 26,211 | (36,606) | 22,167 | 25,650 | 24,802 | 53,701 | 33,437 | 20,929 | | 58,651 | 199,988 |
| Profit | -38% | 12% | -10% | 19% | -28% | 17% | 25% | 18% | 41% | 21% | 18% | 19% | 5% | 15% |
| Cash (Burn)/increase | (21,753) | | (55,016) | | 26,821 | | 20,773 | | (31,657) | | 59,445 | | 15,964 | |
| Cash | 78,357 | | 100,110 | | 155,126 | | 128,305 | | 107,532 | | 139,189 | | 17,351 | 7 |
| Debt | (96,354) | | (97,547) | | (98,751) | | (99,943) | | (101,127) | | (102,301) | | 4,922 | |
| Net Cash/(Debt) | (17,997) | | 2,563 | | 56,375 | | 28,362 | | 6,405 | | 36,888 | (| 22,273 | |
| AR | 125,032 | | 109,622 | | 109,779 | | 105,435 | | 105,372 | | 117,464 | | (1,365) | |
| Inventory | 46,427 | | 56,951 | | 51,938 | | 54,904 | | 42,963 | | 53,396 | | 327 | |
| AP | 142,052 | | 140,543 | | 133,005 | | 91,747 | | 82,277 | | 136,129 | | 12,745 | |





It's all about Cash Flow What is the difference between.... a cash flow statement in annual reports and a cash flow projection for the coming year?





Cash Flow Statement HISTORICAL – what happened?

| Startu Cash Flow S For the Year Ending D | Statement | 18 | |
|--|-----------|------------|--|
| Operating activities | | | |
| Cash received from customers | \$ 72 000 | | |
| Cash received for interest | 1 500 | | |
| Cash paid for salaries | (24 000) | | |
| Cash paid for rent | (11 500) | | |
| Cash paid for other items Cash provided by operating activities Investing activities | (30 000) | \$ 8 000 | |
| Purchase of land | | (25 000) | |
| Financing activities | | (0.500) | |
| Payment of dividends | | (3 500) | |
| Decrease in cash | | \$(20 500) | |
| Cash, January 1 | | 39 700 | |
| Cash, December 31 | | \$ 19 200 | |



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Cash Flow Forecast – what will happen?

| | Month#1 | Month#2 | Month#3 | Month#4 | Month#5 | Month#6 | Month#7 |
|------------------------|---------|---------|---------|---------|---------|---------|---------|
| CASH FLOW #1 (\$): | | | | | | | |
| Open Cash Balance: | 0 | -7680 | -26748 | -46964 | -73712 | -94523 | -102641 |
| Add Cash from Sales: | 0 | 11200 | 27720 | 54886 | 97806 | 142552 | 186394 |
| Less Cash re Expenses: | 0 | -11260 | -10300 | -14567 | -20867 | -22857 | -27450 |
| Less Cash for Prod'n: | -7680 | -19008 | -37636 | -67067 | -97750 | -127813 | -162688 |
| Closing Cash Balance: | -7680 | -26748 | -46964 | -73712 | -94523 | -102641 | -106385 |
| | | | | | | | |

This shows future month-by-month cash balances using Income Statement projections





Ask:

- What's the Cash on Hand? Really – what's in/will be in the bank account?
- What's the *Burn Rate (net or gross)?
- Can all obligations be met?

[*Burn = net monthly cash outflow] VentureLabs[®] U T I F[®]

Best Tool: The Spreadsheet

- •A spreadsheet (e.g. Microsoft XL file) is best
- •Why?
 - helps you understand your numbers
 - customize it for your specific business





Cash Flow Spreadsheet

- Start with the P&L
- What are the assumptions regarding accruals?
- What is the timing of real cash?
- Calculate month-end cash balances (This is what's in your bank account!)
- Go to XL File: mikevolker.com/finproj.xls





Example XL: Monthly P&L Forecast

| | - | _ | | | | <u> </u> | | | - | | | | |
|----------------------|----------|-----------|-----------|----------|-----------|-----------|------------|-----------|-----------|-----------|-----------|-----------|-------------|
| | | Millenium | Tech Corp | | | | Last Updat | ed: | 16-Jan-19 | | | | |
| | Month#1 | Month#2 | Month#3 | Month#4 | Month#5 | Month#6 | Month#7 | Month#8 | Month#9 | Month#10 | Month#11 | Month#12 | FYTOTAL |
| SALES: | | | | | | | | | | | | | |
| #Dealers: | 5 | 5 10 |) 10 | 15 | 15 | 20 | 20 | 20 | 25 | 25 | 25 | 30 | |
| Sales/Dlr: | 3 | 3 4 | 8 | 10 | 15 | 15 | 20 | 20 | 20 | 20 | 20 | 20 | |
| Dealer Sales: | 15 | 5 40 | 80 | 150 | 225 | 300 | 400 | 400 | 500 | 500 | 500 | 600 | |
| Direct Sales: | 5 | 5 10 | 20 | 30 | 40 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | |
| TOTAL UNITS: | 20 |) 50 | 100 | 180 | 265 | 350 | 450 | 450 | 550 | 550 | 550 | 650 | 4,165 |
| AVG. SELLING PRICE: | 560.00 | 554.40 | 548.86 | 543.37 | 537.93 | 532.55 | 527.23 | 521.96 | 516.74 | 511.57 | 506.45 | 501.39 | 451.25 |
| GROSS REVENUE(\$): | \$11,200 | \$27,720 | \$54,886 | \$97,806 | \$142,552 | \$186,394 | \$237,253 | \$234,880 | \$284,205 | \$281,363 | \$278,550 | \$325,903 | \$2,162,713 |
| (Annual Growth Rate) | | | | | | | | | | | | | |
| Unit Costs: | 384 | 380 | 376 | 373 | 369 | 365 | 362 | 358 | 354 | 351 | 347 | 344 | 340 |
| COST OF GOODS SOLD: | \$7,680 | \$19,008 | \$37,636 | \$67,067 | \$97,750 | \$127,813 | \$162,688 | \$161,061 | \$194,884 | \$192,935 | \$191,005 | \$223,476 | \$1,483,003 |
| GROSS MARGIN: | 3520 | 8712 | 17250 | 30739 | 44802 | 58581 | 74565 | 73820 | 89322 | 88428 | 87544 | 102427 | 679710 |
| | 31% | 31% | 31% | 31% | 31% | 31% | 31% | 31% | 31% | 31% | 31% | 31% | 31% |
| EXPENSES: | | | | | | | | | | | | | |
| Sales: | \$9,060 | \$8,167 | \$12,222 | \$15,389 | \$13,386 | \$14,917 | \$17,773 | \$19,966 | \$21,455 | \$21,121 | \$22,927 | \$23,573 | \$199,954 |
| R&D: | \$1,100 | \$867 | \$1,022 | \$2,764 | \$4,761 | \$6,292 | \$9,148 | \$10,416 | \$12,955 | \$12,671 | \$14,677 | \$15,373 | \$92,044 |
| G&A: | \$1,100 | \$1,267 | \$1,322 | \$2,714 | \$4,711 | \$6,242 | \$9,098 | \$10,416 | \$13,005 | \$12,921 | \$15,227 | \$15,923 | \$93,944 |
| TOTAL EXPENSES: | \$11,260 | \$10,300 | \$14,567 | \$20,867 | \$22,857 | \$27,450 | \$36,018 | \$40,797 | \$47,414 | \$46,714 | \$52,830 | \$54,868 | \$385,942 |
| NET PROFIT (BT): | -\$7,740 | .\$1,588 | \$2,683 | \$9,872 | \$21,945 | \$31,131 | \$38,547 | \$33,023 | \$41,908 | \$41,714 | \$34,714 | \$47,559 | \$293,768 |
| NPBT (%) | -69% | -6% | 5% | 10% | 15% | 17% | 16% | 14% | 15% | 15% | 12% | 15% | 14% |



Reminder: Cash vs Accrual

- •What does the P&L say about cash?
- •How much cash do you need?
- •You do not have unlimited credit!
- •Suppliers and employees will not wait.





Example XL: Monthly Cash Flow

| | 1 | | | | | | | | | | | 1 |
|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|
| | Month#1 | Month#2 | Month#3 | Month#4 | Month#5 | Month#6 | Month#7 | Month#8 | Month#9 | Month#10 | Month#11 | Month#12 |
| CASH FLOW #1 (\$): | | | | | | | | | | | | |
| Open Cash Balance: | 0 | -7680 | -26748 | -46964 | -73712 | -94523 | -102641 | -106385 | -66211 | -67011 | -23154 | 20489 |
| Add Cash from Sales: | 0 | 11200 | 27720 | 54886 | 97806 | 142552 | 186394 | 237253 | 234880 | 284205 | 281363 | 278550 |
| Less Cash re Expenses: | 0 | -11260 | -10300 | -14567 | -20867 | -22857 | -27450 | -36018 | -40797 | -47414 | -46714 | -52830 |
| Less Cash for Prod'n: | -7680 | -19008 | -37636 | -67067 | -97750 | -127813 | -162688 | -161061 | -194884 | -192935 | -191005 | -223476 |
| Closing Cash Balance: | -7680 | -26748 | -46964 | -73712 | -94523 | -102641 | -106385 | -66211 | -67011 | -23154 | 20489 | 22733 |
| | | | | | | | | | | | | |
| CASH FLOW #2(\$): | | | | | | | | | | | | |
| Open Cash Balance: | -26688 | -64324 | -142651 | -239501 | -354161 | -482830 | -568942 | -648723 | -691282 | -685832 | -721842 | -484350 |
| Add Cash from Sales: | 0 | 0 | 11200 | 27720 | 54886 | 97806 | 142552 | 186394 | 237253 | 234880 | 284205 | 281363 |
| Less Cash re Expenses: | 0 | -11260 | -10300 | -14567 | -20867 | -22857 | -27450 | -36018 | -40797 | -47414 | -46714 | -52830 |
| Less Cash for Prod'n: | -37636 | -67067 | -97750 | -127813 | -162688 | -161061 | -194884 | -192935 | -191005 | -223476 | | |
| Closing Cash Balance: | -64324 | -142651 | -239501 | -354161 | -482830 | -568942 | -648723 | -691282 | -685832 | -721842 | -484350 | -255817 |
| | 1 | | | | | | | | | | | |

Both of these are based on the same P&L numbers. The only difference is assumptions regarding the timing of payments:

#1:Pay for production materials (CoGs) in month of shipment; collect payment from customers after one month #2:Pay for production materials (CoGs) two months before shipment; collect payment from customers after 2 months





Which is correct?

•\$106,385 or \$721,842?



Series1 🗕

Series2

- It depends on the assumptions
- •How much capital should you raise?
- •Better too much than too little
- •Be realistic!





Matching Sources to Needs

- •\$106K may be easy to raise Is it enough?
- •\$721K may be out of reach Perhaps reduce revenues





What about Capital Expenses (CapEx)?

- Caveat: The Example excludes CapEx
- Expenses include: Monthly rent & utilities Monthly salaries Misc. minor general & admin supplies
- Capital Expenses (eg > \$1K) include: Equipment, machinery, property

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Recap: How to account for CapEx?

- CapEx items are amortized over time (non-cash)
- CapEx items are assets on the Balance Sheet
- But keep off Balsheet when possible (lease) (i.e. convert CapEx to monthly "rent")
- Insert CapEx items in Cash Flow as required





How to add in CapEx Items

• Just add more rows to your cash flow:

| | Month#1 | Month#2 | Month#3 | Ν |
|-------------------------------|---------|---------|---------|---|
| CASH FLOW #1 (\$): | | | | |
| Open Cash Balance: | 0 | -7680 | -26748 | |
| Add Cash from Sales: | 0 | 11200 | 27720 | |
| Less Cash re Expenses: | 0 | -11260 | -10300 | |
| Less Cash for Prod'n: | -7680 | -19008 | -37636 | |
| Init Closing Cash Balance: | -7680 | -26748 | -46964 | |
| Less Cash for Fixed Assets | -120000 | 0 | -10000 | |
| Cumulative cash for Fixed Ass | -120000 | -120000 | -130000 | |
| Closing Cash Balance: | -127680 | -146748 | -176964 | |

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| | FIXED ASSETS: | | | |
|---|-------------------------------|--------|--------|--------|
| | Open Bal: | 0 | 119000 | 119000 |
| Break these line items into more | Equipment: | 40000 | | |
| granular details to help in your planning | Furnishings: | 25000 | | |
| granular details to help in your planning | Tooling, Molds: | 40000 | | 10000 |
| | Intellectual Property: | 15000 | | |
| | Depreciation (add to expenses | -1000 | | |
| | = amt to add to CashFlow** | 120000 | 0 | 10000 |
| uralaha | = Fixed Asset Balance | 119000 | 119000 | 129000 |
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Sensitivity Analysis

- Spreadsheets allow you to try many scenarios
- •Ask: What is the ideal situation? What is the worst-case situation?
- •E.G. What if revenues are 50% less? What if expenses are double?





How Many Months?

- •Do monthly until cash flow is positive
- •Then complete for at least 5 years (see example – mikevolker.com/finproj.xls)
- Update regularly





5 Year Projection

| | FYTOTAL | FY2 | FY3 | FY4 | FY5 |
|----------------------|-------------|-------------|-------------|-------------|--------------|
| GROSS REVENUE(\$): | \$2,162,713 | \$3,608,560 | \$6,125,530 | \$8,912,647 | \$12,967,901 |
| (Annual Growth Rate) | | 167% | 170% | 146% | 146% |
| Unit Costs: | 340 | 272 | 245 | 233 | 221 |
| COST OF GOODS SOLD: | \$1,483,003 | \$2,268,238 | \$3,572,474 | \$5,090,776 | \$7,254,356 |
| GROSS MARGIN: | 679710 | 1340322 | 2553056 | 3821871 | 5713545 |
| | 31% | 37% | 42% | 43% | 44% |
| EXPENSES: | | | | | |
| Sales: | \$199,954 | \$399,908 | \$599,862 | \$749,828 | \$899,793 |
| R&D: | \$92,044 | \$138,066 | \$172,583 | \$207,099 | \$248,519 |
| G&A: | \$93,944 | \$140,916 | \$197,282 | \$256,467 | \$307,761 |
| TOTAL EXPENSES: | \$385,942 | \$678,890 | \$969,727 | \$1,213,394 | \$1,456,073 |
| NET PROFIT (BT): | \$293,768 | \$661,432 | \$1,583,329 | \$2,608,477 | \$4,257,473 |
| | 14% | 18% | 26% | 29% | 33% |

Is this "good"?







It Depends....

- It drives EXIT valuation
- Is it achievable?
- Is it realistic (check against comparables)?
- •Do you want to commit 5+ years to it?





Bonus

From the cash flow, you can easily do month-end balance sheets in addition to reliable proforma income statements!

(refer to example)





Sanity Checks

- Do revenues seem unrealistically high?
- •Are my margins similar to other similar firms?
- •Have I overlooked any expenses?
- •Have I build in some contingencies?
- Do I have a sales plan or a sales forecast?
- •Are my assumptions reasonable?





Summary

- Using XL can give you a hands-on financial understanding of your company
- From the P&L, you can get cash flow and balance sheets
- Test your assumptions do worst/best cases
- Investors love to see solid financial planning
- •Remember Happiness is Positive Cash Flow!

Download: mikevolker.com/finproj.xls

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