

ENGINEERING ENTREPRENEURSHIP
FROM
IDEA TO BUSINESS PLAN
CAMBRIDGE UNIVERSITY PRESS 2016

BY
•
PAUL
SWAMIDASS

Four-page **PDF file** in this download shows four Excel workbooks, one each for projecting:

1. Revenue for five years
2. Cost of Goods Sold (COGS)
3. Sales and General Administrative Expenses (SG&A)
4. 5-yr Cash Flow using the above three projections

REQUEST FILL-ABLE EXCEL TEMPLATES

If you want Fill-able Excel templates send email requesting a copy of the four Excel templates to:

info@engineer-entrepreneur-book.com

[Order book from Amazon.com](https://www.amazon.com)

COMPLETE YOUR BUSINESS MODEL FIRST

CASH FLOW FOR USE IN BUSINESS PLANS

Engineers/scientists note: (...) is a negative number in the tables

Cash Flow Projections (enter ESTIMATES in rows in red)

Total 4 worksheets--see bottom row (Revenue, COGS, SG&A, and Cash Flow)
 Complete worksheets in this order: 1) Revenue, 2) COGS, 3) SG&A, 4) Cash Flow

Year:	1	2	3	4	5	
Sales	\$ 100,000	\$ 500,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	Row posts automatically from REVENUE workbook
(Cost of Goods Sold)	(102,000)	(100,000)	(380,000)	(380,000)	(380,000)	Row posts automatically from COGS workbook
Gross Margin	(2,000)	400,000	1,620,000	1,620,000	1,620,000	
(Depreciation)	(0)	(0)	(0)	(0)	(0)	
(SG&A)	(26,500)	(98,500)	(368,500)	(375,500)	(375,500)	Row posts automatically from SG&S workbook
Operating Income	(28,500)	301,500	1,251,500	1,244,500	1,244,500	
(Interest Expense)	-	-	-	-	(7,500)	
Income Before Taxes	(28,500)	301,500	1,251,500	1,244,500	1,237,000	
(Taxes)	8,550	(90,450)	(375,450)	(373,350)	(371,100)	
Net Income	\$ (19,950)	\$ 211,050	\$ 876,050	\$ 871,150	\$ 865,900	
Depreciation Add Back	0	0	0	0	0	
Net Cash Inflows / (Outflows)	(19,950)	211,050	876,050	871,150	865,900	
Beginning Cash Balance	-	80,049	291,099	1,167,149	2,038,299	
Seed Investment						
Angel/Venture Capital	100,000				(305,176)	
(Capital Expenditures)	(1)				(75,000)	
Loans / (Loan Payments)	-	-	-	-	75,000	
Ending Cash	\$ 80,049	\$ 291,099	\$ 1,167,149	\$ 2,038,299	\$ 2,599,024	

NOTE: This set of 4 templates form an educational tool for students and inventors without finance background

The templates are intended to be basic and avoid unwanted accounting sophistication

Several student teams has used these templates or parts of them in winning business plan contests

Caution: lecture by the author prevents erroneous use/conclusions by students/users

REVENUE PROJECTION

COMPLETE YOUR BUSINESS MODEL FIRST
ENTER ESTIMATED QUANTITIES IN ROWS IN RED

Year:	1	2	3	4	5
Revenue Demand:					
Units Sold	2,000	10,000	40,000	40,000	40,000
Other revenue					
Other revenue					
Price Per Unit	50.00	50.00	50.00	50.00	50.00
Installation / Service Revenue	-	-	-	-	-
Total Revenue Per Unit	50.00	50.00	50.00	50.00	50.00
Total Revenue Per Year	\$ 100,000	\$ 500,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000

NOTE: This set of 4 templates form an educational tool for students and inventors without finance background

The templates are intended to be basic and avoid unwanted accounting sophistication

Several student teams has used these templates or parts of them in winning business plan contests

Caution: lecture by the author prevents erroneous use/conclusions by students/users

Engineers/scientists note: (...) is a negative number in the tables

Total 4 worksheets--see bottom row (Revenue, COGS, SG&A, and Cash Flow)

Complete worksheets in this order: 1) Revenue, 2) COGS, 3) SG&A, 4) Cash Flow

COST OF GOODS SOLD (COGS)

ENTER ESTIMATED QUANTITIES IN ROWS IN RED

Year:	1	2	3	4	5
Cost Of Goods Sold:					
Units Produced (from Rev.)	2,000	10,000	40,000	40,000	40,000
Direct Cost Per Unit:					
Materials 1	15.00	7.50	7.00	6.75	6.75
Materials 2	1.00	1.00	1.00	1.00	1.00
Labor	20.00	1.00	1.00	1.25	1.25
Other costs					
Other/Outsourcing	15.00	0.50	0.50	0.50	0.50
Cost Per Unit	51.00	10.00	9.50	9.50	9.50
Total Cost of Goods Sold	102,000	100,000	380,000	380,000	380,000

NOTE: This set of 4 templates form an educational tool for students and inventors without finance background

The templates are intended to be basic and avoid unwanted accounting sophistication

Several student teams has used these templates or parts of them in winning business plan contests

Caution: lecture by the author prevents erroneous use/conclusions by students/users

COMPLETE YOUR BUSINESS MODEL FIRST

Total 4 worksheets--see bottom row (Revenue, COGS, SG&A, and Cash Flow)
 Complete worksheets in this order: 1) Revenue, 2) COGS, 3) SG&A, 4) Cash Flow

Selling, General and Administrative Expenses (SG&A)

COMPLETE YOUR BUSINESS MODLE FIRST
Enter estimated quantities FOR YOUR BUSINESS in rows in red

	Year:	1	2	3	4	5
Depreciation on Capital Expenditures:						
Cost	\$	1				\$ 1
Life in Years		5				1
Depreciaton Expense		0	0	0	0	0
Units Produced (from Rev.)		2,000	10,000	40,000	40,000	40,000
Selling Expenses Per Unit:						
Sales Commissions		1.00	1.00	1.00	1.00	1.00
Sales Salaries		2.00	2.00	2.00	2.00	2.00
Shipping		-	-	-	-	-
Advertising		6.00	6.00	6.00	6.00	6.00
Other expenses		-	-	-	-	-
Total Selling Expenses Per Unit		9.00	9.00	9.00	9.00	9.00
Total Selling Expenses		18,000	90,000	360,000	360,000	360,000
General and Administrative Expenses:						
Salary and Benefits						
Utilities		1,000	1,000	1,000	1,000	1,000
Rent		2,000	2,000	2,000	4,000	4,000
Insurance		500	500	500	500	500
Other expenses		5,000	5,000	5,000	10,000	10,000
Total General/Administrative Expenses		8,500	8,500	8,500	15,500	15,500

NOTE: This set of 4 templates form an educational tool for students and inventors without finance background

The templates are intended to be basic and avoid unwanted accounting sophistication

Several student teams has used these templates or parts of them in winning business plan contests

Caution: lecture by the author prevents erroneous use/conclusions by students/users

Total 4 worksheets--see bottom row (Revenue, COGS, SG&A, and Cash Flow)
 Complete worksheets in this order: 1) Revenue, 2) COGS, 3) SG&A, 4) Cash Flow