Cashflow Plan

Comprehensive Business Cashflow Planner

for

Microsoft $^®$ Excel for Windows$^{™}$

by

PlanWare - Invest-Tech Limited

Free, Micro, Lite, Plus, Super & Ultra Versions
with combined US/Canadian & UK/International formats

Cashflow Plan

Comprehensive Business Cashflow Planner

Table of Contents

<div style="border:1px solid black">

<u>Tip</u>

Use Word's (or Adobe Acrobat's) Find facility (access via **Edit | Find** …) to search the entire document for key words or phrases.

</div>

If you change the paper size for printing, you may need to update this table of contents - place cursor within it and press F9.

As PlanWare - Invest-Tech has a policy of continual product improvement, the information and data contained in this manual are subject to change without notice and do not represent a commitment by the vendor. Diagrams in this manual relate to the Ultra version of Cashflow Plan.

Neither the manual nor software may be copied or reproduced in any form, in whole or in part, without prior written permission of PlanWare - Invest-Tech Limited.

PlanWare - Invest-Tech Limited
27 Ardmeen Park. Blackrock, Co Dublin, Ireland

Web: http://www.planware.org/   Email: mailto:info@planware.org

Tel: 283 4083   Fax: 278 2391

Dial codes: IRL: 01-   UK: 00-353-1-   US: 011-353-1-   Other: +353-1-

Very Quick Start

The procedures below should enable an Excel spreadsheet user to get any version of Cashflow Plan up and running with minimal initial instruction. If problems are encountered, refer to Section 4 Loading Cashflow Plan for the First Time or Section 5 Getting Started with Cashflow Plan.

Cashflow Plan requires Microsoft Excel for Windows (versions 5, 7, 8, 95, 97, 2000, XP or higher) running with Windows 3.1 or Windows 95/98/NT/2000/XP on a PC with a 486/50Mhz or higher processor, 16+ MB of memory, VGA or better display and 20 Mb disk space.

When being loaded for the first time, Cashflow Plan needs 16 Mb of disk space to enable it to automatically create backup copies (CASHWORK.XLS and/or CASHTEST.XLS) during set up. If this space is not available, Cashflow Plan will skip their creation.

Note that Cashflow Plan must always be installed from supplied installation disk(s) or via a downloaded installation file. It will <u>not</u> operate correctly if it is installed by simply transferring a Cashflow Plan workbook file from one PC to another.

Installation of Cashflow Plan (Windows 95/98/NT/2000/XP)

When Cashflow Plan starts loading, Excel may display a dialog about macros and viruses. If Cashflow Plan was secured from a reliable source or directly from PlanWare - Invest-Tech, press the Enable Macros button. Note that Cashflow Plan will not load properly if the Disable Macros button is pressed. As loading progresses, a further dialog may appear about the location of macros. This can be disabled or ignored.

If using Excel 2000 (or higher) make sure that security is set to Medium (via **Tools | Macro | Security | Security Level**) before loading Cashflow Plan. If it needs to be reset, close and reopen Excel for the reset to take effect.

Installation takes a few minutes. The procedure is as follows:

1. Close all other applications.

2. Confirm that at least 16 Mb of space is free on the hard disk to which Cashflow Plan will be installed.

3. Insert the Cashflow Plan Product Disk in a disk drive and use Start | Run to run the executable file CASHPLAN.EXE by entering A:\CASHPLAN.EXE at the Open prompt (replace A: by B: if appropriate). Follow on-screen instructions to install Cashflow Plan's files into the appropriate folders.

   If Cashflow Plan was acquired by downloading from the Internet to a temporary folder, the downloaded executable file should be run and its on-screen instructions followed to install Cashflow Plan's files into the appropriate folders.

4. When installation has finished, go to the Cashflow Plan menu within the Programs Menu and review any indicated README file.

5. Load Excel and open the main Cashflow Plan workbook file CASHPLAN.XLS located in the folder specified during installation. During loading, follow on-screen prompts (e.g. enable macros) and then wait a few moments while copies of Cashflow Plan are created. These copies, CASHWORK.XLS and CASHTEST.XLS, should be used as the primary working copy and for experimentation respectively. CASHPLAN.XLS should be carefully retained as the original master copy.

Note: If Cashflow Plan failed to detect the correct size of the screen display being used, use ***Setup | Change Default Zoom Value**.

Installation of Cashflow Plan (Windows 3.1)

Installation takes a few minutes. The procedure is as follows:

1. Close all other applications.

2. Confirm that at least 16 Mb of space is free on the hard disk to which Cashflow Plan will be installed.

3. Insert the Cashflow Plan Product Disk in a disk drive and use the Run option within File Manager or Program Manager to run the executable file CASHPLAN.EXE by entering A:\CASHPLAN.EXE at the prompt (replace A: by B: if appropriate). Follow on-screen instructions to install Cashflow Plan's files into the appropriate sub-directories.

   If Cashflow Plan was acquired by downloading from the Internet to a temporary sub-directory, the downloaded executable file should be run and its on-screen instructions followed to install Cashflow Plan's files into the appropriate sub-directories.

4. Once installation is complete, go to the Cashflow Plan Application Group and review any displayed README file.

5. Load Excel and open the main Cashflow Plan workbook file CASHPLAN.XLS located in the sub-directory specified during installation. Once loaded, follow on-screen prompts and then wait a few moments while copies of Cashflow Plan are created. These copies, CASHWORK.XLS and CASHTEST.XLS, should be used as the primary working copy and for experimentation respectively. CASHPLAN.XLS should be carefully retained as the original master copy.

Note: If Cashflow Plan failed to detect the correct size of the screen display being used, use ***Setup | Change Default Zoom Value**.

Familiarization with Cashflow Plan

When running Cashflow Plan with W95/98/NT/2000/XP, it is best to place the taskbar at the bottom of the screen in order to improve the view of reports etc.

1. To become familiar with the basics and geography of Cashflow Plan, take the Quik-Tour (***Cash Help | Quik-Tour**) from within the previously created CASHTEST.XLS file.

2. Run the cursor across Excel's menu bar - File, Edit etc. Note that Cashflow Plan has added several new menus (***Assumptions, *Protection** etc.).

3. Click the *Sales* worksheet tab (or the "MA" toolbar button) to go to the monthly assumptions report for sales forecasts etc. Note that assumption values (displayed in blue) should be entered or altered only within the rectangular boxed-in areas opposite the ->> or <<->> arrows. Values shown in black contain formulae and are normally locked (protected).

4. Try adding or changing some of the supplied assumption values for sales and recalculate (***Tools | Calculate All & Check**) to check the model's integrity and to update all the monthly and full-year output reports. (Note that Cashflow Plan always uses manual calculation instead of Excel's default automatic calculation setting).

5. Click worksheet tabs to view the other monthly assumption reports (*DirCost*, *Ohead* etc.) and change/add assumption values as desired.

6. Use Cashflow Plan's menus, worksheet tabs and buttons (especially "<-" and "->") to view the remaining assumption and output reports and charts.

7. Explore Cashflow Plan's help facilities within the ***Cash Help** menu.

8. Review the contents of the Quik-Start task list (***Cash Help | Quik-Start**) at the *Start* worksheet tab.

Using Quik-Plan - Part 1

Quik-Plan is a facility within Cashflow Plan that simplifies the preparation of *first-cut*, high-level projections. To use it to compile real or hypothetical trial financial projections, proceed as follows:

1. Save CASHTEST.XLS with an appropriate new file name e.g. CASHQUIK.XLS.

2. Select ***Setup | Basic Model Info** and enter basic information about the business to be modeled.

Business Name: Any Corp Inc

Business Form: ⊙ Corporation ○ Sole Trader etc

Report Formats, Terminology and Spellings: ⊙ US/Canadian ○ UK/International

Start Month for Projections: January

Start Year for Projections: 2001

Currency Symbol (max of 3 characters): $

Currency Unit (select denomination): 000

Short Description of Input/Output Sales Tax
For example: Enter "Sales Tax" for sales taxes; enter "VAT" for Valued Added Tax; enter "GST" for Goods & Services Tax and so on. Do not include

Help   Done   Cancel

3. Select ***Setup | Model Title** and give the model an appropriate title e.g. *First Attempt with Quik-Plan.*

4. Select ***Tools | Quik-Plan** to make *first-cut* projections. Delete or overwrite the supplied assumptions and then run Quik-Plan with the newly entered values.

5. Review a selection of the monthly assumption & output reports and charts to see how Quik-Plan operates and Cashflow Plan handles its assumptions.

6. Revise and expand Quik-Plan's assumptions from within Cashflow Plan's monthly assumption reports and recalculate as desired (select either ***Tools | Calculate All & Check** or the "C" button on the toolbar).

7. Experiment with Cashflow Plan's data-entry facilities which are located within the ***Assumptions** menu (i.e. **Clear Assumptions**, **Constant Assumptions** etc.) or accessible via buttons in the toolbar (refer to Section 5.6 Fast Entry of Assumptions).

Using Quik-Plan - Part 2

1. View the Textual Summary Report (*Text* worksheet tab or ***Output | Textual Summary Report** - *Not applicable to Free)* and other output reports & charts.

2. Print selected assumption or output reports and charts.

3. Use the sensitivity analysis facility (***Tools | Sensitivity Analysis**) to globally change groups of key monthly assumptions. *Not applicable to Free or Micro.*

4. Review Cashflow Plan's other planning tools for analyzing what-ifs (Section 6.9) and short-term cashflow planning (Section 6.10).

5. Use Cashflow Plan's roll-forward facility to shunt all its assumptions and projections forward one month (Section 6.11). This will advance the start date of projections by one month and replace the original assumptions for the first month by the second month's original assumptions and so on. Assumptions for the original twelfth month will be utilized for the new eleventh and twelfth months.

6. View the Cashflow Improver in the *Improver* worksheet to identify and plan where cash flows could be improved (Section 6.12).

7. If dealing with subsidiaries, view the Report for Consolidation (Section 6.13) and explore the Consolidator Guide document. *Not applicable to Free, Micro, Lite or Plus.*

8. Continue exploring Cashflow Plan's menus etc. and entering or changing assumptions. Use its online help (***Cash Help**) as appropriate. Refer to Section 6 Using Cashflow Plan and Appendix 5 Guidance on Entering Assumptions for further assistance.

Building a New Model

To start constructing a new model (without using Quik-Plan), reload CASHWORK.XLS and immediately save it with an appropriate new file name. Then proceed as outlined below.

Note that a user's assumptions should be entered into Assumption Reports only. Output Reports contain extensive formulae which generate the projections based on these assumptions. The only exception is that opening balance sheet values must be entered directly into column F of the monthly Balance Sheets (at worksheet tab *Bal*).

Be sure to save the new model's file at regular intervals using incrementing file names, e.g. MODEL-1.XLS, MODEL-2.XLS and so on.

	Initiating Keystrokes
Remove all existing assumptions	ALT+S, C
⇓	
Enter basic data about the business, projection start date, currency etc.	ALT+S, B
⇓	
Assign names to sales groups (*Not applicable to Free or Micro*)	ALT+S, G
⇓	
Enter title for the new model	ALT+S, E
⇓	
Enter monthly assumptions	ALT+A etc.

⇓

Enter opening balance sheet	ALT+U, B

⇓

Final recalculation	ALT+L, A

⇓

Save projections	ALT+F, A

⇓

Review output reports & charts	ALT+U, ALT+C

⇓

Print reports & charts	ALT+N, ALT+R

List of Toolbar Buttons

Note: To see a button's hint on the toolbar, slide the mouse's pointer slowly over the button.

Print reports within selected groups of reports
Print the current report

Go to the first Monthly Assumptions Report: Assumptions Report No. 1 - Sales & Finished Goods Inventory Targets (*Sales & Finished Goods Stock Targets*)
Go to the first Monthly Output Report: Cashflow Projections

Access charts

Mark position of cursor
Jump back to the marked position of cursor

Move backward one report
Move forward one report

Calculate entire model with error checking
Calculate current sheet without error checking
Go to Key Cashflow Projections

Clear unprotected values in assumption report row
Enter constant assumption value across remaining months
Enter incremented assumption value across remaining months
Enter assumption value changed by % across remaining months
Enter total assumption value & allocate equally across months
Allocate assumption across twelve months based on report's seasonal index (*Not applicable to Free)*

Unlock selected range
Lock selected range
Unprotect current report
Protect current report

Freeze panes within all reports

Restore default zoom for all reports
Zoom into current report by 10%
Zoom out from current report by 10%

Creating a Plan within Ten Minutes

Cashflow Plan incorporates a special facility, called Quik-Plan, for producing outline monthly projections based on high-level assumptions entered into a special report (at the *Quik* worksheet). It is ideally suited for producing *first-cut* projections or for compiling preliminary forecasts which can be fine-tuned subsequently via Cashflow Plan's more detailed monthly assumption reports.

For a full explanation of Quik-Plan refer to Section 6.4 Using Quik-Plan. See also Appendix 4 - How Quik-Plan Handles Assumptions.

Even a new user of Cashflow Plan should be able to produce first-cut projections in less than ten minutes.

The procedure below summarizes the key tasks involved in using Quik-Plan and very quickly producing comprehensive projections as a Textual Summary Report.

Procedure for Using Quik-Plan

	Initiating Keystrokes
Enter basic data about the business, projection start date, currency etc.	ALT+S, B
⇓	
Assign names to sales groups (*Not applicable to Free or Micro*)	ALT+S, G
⇓	
Enter title for the new model	ALT+S, E
⇓	
Save the model as a new file	ALT+F, A
⇓	
Use Quik-Plan	ALT+L, Q
⇓	
Save projections	ALT+F, S
⇓	
View output reports & charts	ALT+U / ALT+C
⇓	
Review/refine assumptions	ALT+A
⇓	
View/print Textual Summary Report (*Not applicable to Free*)	ALT+U, X / ALT+N, X

Cashflow Plan
Comprehensive Business Cashflow Planner

1. Welcome to Cashflow Plan

1.1. Welcome

Cashflow Plan is a powerful, easy-to-use software package for preparing comprehensive monthly cashflow projections for twelve months ahead. It is available in six versions which can be configured to display reports etc. using either UK/International and US/Canadian accounting layouts. All versions – Free, Micro, Lite, Plus, Super & Ultra - are suitable for businesses ranging in size from very small to major and have the flexibility to handle manufacturing, distribution and service businesses. They are suitable for established businesses as well as for young ventures and for strategic business units within major corporations. Cashflow Plan is also ideal for use by professional advisers, consultants, training organizations, financial institutions and enterprise support agencies.

Cashflow Plan is primarily a workbook file which runs on the best selling Excel spreadsheet from Microsoft. As Cashflow Plan incorporates extensive formulae and pre-programmed menus and buttons, only a very basic knowledge of Excel is required to prepare highly professional and presentable projections. Because Cashflow Plan is an *open system*, advanced Excel users can utilize their expertise to enhance and expand Cashflow Plan to meet their particular needs (see Section 7 Changing Cashflow Plan).

> System requirements: Excel for Windows (versions 5, 7, 8, 95, 97, 2000, XP or higher) running with Windows 3.1 or Windows 95/98/NT/2000/XP on a PC with a 486/50Mhz or higher processor, 16+ MB of memory, VGA or better display and 20 Mb disk space.

Cashflow Plan incorporates a comprehensive range of data entry and planning facilities and features. It is suitable for managers and business people with minimal previous experience of financial or business planning as well as for experienced planners, accountants, spreadsheeters and model-builders.

Cashflow Plan will be especially useful to businesses operating with tight profit margins; or having limited financial resources; or planning for growth or radical change; or raising short-term finance; or compiling cash budgets; or preparing business improvement plans and so on. For these businesses, Cashflow Plan will help management to forecast cash requirements and thereby improve control over cashflows and conserve their cash resources.

1.2. Powerful & Easy-to-Use

Cashflow Plan is pre-formatted to handle the very wide range of the variables and functions normally encountered when preparing cashflow projections. Based on the monthly assumptions entered by the user, it compiles detailed and fully-integrated financial projections for a year ahead on a monthly basis. It produces pro-forma financial and management reports together with numerous charts for key variables. Cashflow Plan contains facilities for accelerating the process of preparing projections and for undertaking global or specific *what-if* sensitivity analyses alongside scenarios created using Excel's built-in Scenario Manager.

Cashflow Plan is easy to use because all the formulae for financial calculations are pre-written; reports are pre-formatted and clearly laid out; menu structures follow logical sequences; and *online* help is available to the user at all stages. For experienced users of Excel, Cashflow Plan offers a familiar environment which can be tailored and expanded to meet specialist needs and to utilize existing spreadsheet-based data without the need for any special import/export procedures.

The time required to set up and become familiar with Cashflow Plan is less than an hour as compared with the many hundreds of hours that would be required to construct a comparable-quality financial model.

To get started, refer to Very Quick Start near the front of the manual for fast-track guidance on installing Cashflow Plan; exploring its main features and facilities; and developing an initial set of projections. Ultimately, the best way to learn about Cashflow Plan is to start using it in a real situation by entering meaningful assumptions, compiling and reviewing projections, printing reports and charts etc.

1.3. Scope of Manual

This manual provides detailed explanations on all aspects of Cashflow Plan and will help users make effective use of the package with the minimum of preparation. It is structured as follows:

- ❑ Sections 2 and 3 introduce the concept of cashflow planning and Cashflow Plan respectively.
- ❑ Section 4 explains how to install and load Cashflow Plan.
- ❑ Section 5 describes the basics of Cashflow Plan.
- ❑ Section 6 contains detailed advice on using Cashflow Plan in *real* planning situations and introduces its more advanced facilities.
- ❑ Section 7 describes possible approaches to making simple and complex changes to Cashflow Plan.
- ❑ Finally, Section 8 reviews support for Cashflow Plan.

New users are invited to quickly browse through the entire manual before using Cashflow Plan to gain a general appreciation of its overall scope and content.

1.4. Help System

When Cashflow Plan's Online Help is first loaded (via ***Cash Help**), a conventional help contents page or dialog appears depending on the version of Windows being used.

When using Cashflow Plan's Help, specific procedures may be displayed in separate windows that remain open and *on top* until closed.

Closing Help also closes any open procedural windows.

The Glossary of Terms within the Online Help refers to the variables used in the Assumption Reports. Its definitions provide additional guidance on entering assumptions and explanations of formulae. It supplements Appendix 5 - Guidance on Entering Assumptions.

Cashflow Plan Free is not specifically addressed in Cashflow Plan's manual or online help. When reviewing these sources of assistance, bear in mind that Cashflow Plan Free is very similar to Cashflow Plan Micro but only covers a 6-month rather than 12-month time horizon.

1.5. Typographical Conventions

The following typographical conventions are used throughout this manual :

Aaaaaa | Aaaaaa indicates a menu option

AAAAAAA.XLS specifies a file name

Aaaaaa refers to a worksheet name

"zzzzzzz" refers to a toolbar button

This manual covers the US/Canadian and UK/International editions of Cashflow Plan. For simplicity, it uses North American spellings. Where appropriate, descriptions of variables appearing within Cashflow Plan are presented in both US/Canadian and UK/International formats with italics used to identify the latter. For example:

Finished Goods Inventory (*Finished Goods Stock*)

References to features or facilities excluded from less powerful versions of Cashflow Plan are signified by advisory notes, e.g. ***Not applicable to Free or Micro.***

1.6. About Exl-Plan - Business Financial Planner

By design, Cashflow Plan concentrates on shorter term cashflow planning.

It is complemented by PlanWare - Invest-Tech's **Exl-Plan** range which is a more extensive business and financial planning tool primarily intended for longer term business, financial and strategic planning.

Exl-Plan comprises a series of powerful, easy-to-use, Excel-based software packages for preparing fully-integrated, comprehensive financial projections for raising finance, budgeting and business planning covering time horizons from three years up to seven years ahead. They can also be used as a tool for strategic and corporate planning, business restructuring, financial appraisals and performance monitoring within almost any size of business.

The Exl-Plan range (Free, Micro, Lite, Pro, Super, Super Plus, Ultra and Ultra Plus) is available using either *UK/ International* or *US/ Canadian* accounting conventions - sixteen variants in all. These have the flexibility to handle manufacturing, distribution and service businesses and are suitable for established firms as well as for new ventures and strategic business units within major corporations. Exl-Plan can accommodate business with annual sales ranging from about $/£ 50,000 up to $/£ 100 million or more.

Each version of Exl-Plan comprises several integrated sub-models residing within the main financial model. These cover one/three/five/seven year forecasting periods as follows:

- ❑ Detailed assumptions and projections for the initial 12 months (36 months with Ultra & Ultra Plus)

- ❑ Annualized projections based on the monthly projections

❑ Less detailed quarterly assumptions and projections for the second and third years (fourth and fifth years with Ultra & Ultra Plus)

❑ Annualized projections based on the monthly & quarterly projections

❑ Projections for fourth & fifth years based on simplified annual assumptions for Pro, Super and Super Plus (sixth/seventh years for Ultra and Ultra Plus).

Projected profit & loss accounts (*income statements*), cashflows, balance sheets and ratio analyses are generated for each month, quarter and year. Output from Exl-Plan includes:

❑ Over thirty pro-forma reports containing assumptions, profit & loss accounts, cashflow projections & statements, balance sheets, performance reviews and summaries for months, quarters and years. (Sixty reports with Ultra & Ultra Plus).

❑ Nineteen separate charts graphing key projections, ratios etc. for months, quarters and years for over 100 variables.

Further details and trial-version downloads can be obtained from the PlanWare website at http://www.planware.org/exlplan.htm

1.7. About PlanWare - Invest-Tech

Formed in 1983, Invest-Tech is an independent business and management consultancy based in Ireland and specializing in business planning & strategy, and the development of related software. It is a Registered Practice within the Institute of Management Consultants in Ireland (IMCI) and a Company Member of the Association of Shareware professionals (ASP) in the US.

Further information about Invest-Tech's other software products for business, cashflow & financial planning and access to downloadable shareware versions can be obtained from its PlanWare web site at http://www.planware.org/

This site also contains details of all new versions of Cashflow Plan as soon as they become available.

2. Cashflow Planning

2.1. Introduction to Cashflow Planning

This general introduction to cashflow planning will be of particular interest to non-financial managers and business people with limited financial expertise.

The following topics are discussed:

2.2. Profit vs. Cashflow

When planning the short- or long-term funding requirements of a business, it can be much more important to forecast its likely cash requirements than to project its profitability etc. Whilst profit, the difference between sales and costs within a specified period, is a vital indicator of the performance of a business, the generation of a profit does not necessarily guarantee its development, or even survival, <u>unless the business has adequate cash.</u>

More businesses fail for lack of cash than for want of profit.

Sales and costs and, therefore, profits do not necessarily coincide with their associated cash inflows and outflows. While a sale may have been secured and goods delivered, the related payment may be deferred as a result of giving credit to the customer. At the same time, payments must be made to suppliers, staff etc.; and cash must be invested in rebuilding depleted stocks; and new equipment may have to be purchased etc.

The net result of the foregoing cash movements is that cash receipts can lag cash payments and that, whilst profits may be reported, the business may experience a short-term cash shortfall. For this reason it is essential to forecast cashflows as well as to project likely profits.

The following simplified example illustrates the timing differences between profits and cash flows:

Income Statement for Month 1	Total
Sales ($000)	75
Costs ($000)	65
Profit ($000)	10

Cashflows relating to Month 1	Month 1	Month 2	Month 3	Total
Receipts from sales ($000)	20	35	20	75
Payments to suppliers etc. ($000)	40	20	5	65
Net cash flow ($000)	-20	15	15	10
Cumulative net cash flow ($000)	-20	-5	10	10

This shows that the cash associated with the reported profit for Month 1 will not fully materialize until Month 3 and that a serious cash short-fall will be experienced during Month 1 when receipts from sales will total only $20,000 as compared with cash payments to suppliers of $40,000.

2.3. Calculating Cashflows

Normally, the main sources of cash inflows to a business are receipts from sales, increases in bank loans, proceeds of share issues and asset disposals, and other income such as interest earned. Cash outflows include payments to suppliers and staff, capital and interest repayments for loans, dividends, taxation and capital expenditure.

Net cashflow is the difference between the inflows and outflows within a given period. A projected cumulative positive net cashflow over several periods highlights the capacity of a business to generate surplus cash and, conversely, a cumulative negative cashflow indicates the amount of additional cash required to sustain the business.

Cashflow planning entails forecasting and tabulating all significant cash inflows relating to sales, new loans, interest received etc. and then analyzing in detail the timing of expected payments relating to suppliers, wages, other expenses, capital expenditure, loan repayments, dividends, tax, interest payments etc. The difference between the cash in- and out-flows within a given period indicates the net cashflow. When this net cashflow is added to or subtracted from opening bank balances, any likely short-term bank funding requirements can be ascertained.

2.4. Cashflow Forecasting

With the aid of a computer and suitable software, a mathematical model (like Cashflow Plan) can be used to prepare cashflow projections and project short-term banking requirements for a business. The use of a computer-based model reduces the tedium of carrying out numerous repetitive calculations and simplifies the alteration of assumptions and the presentation of results.

A cashflow model can be used to compile forecasts, assess possible funding requirements and explore the likely financial consequences of alternative strategies. Used effectively, a model can help prevent major planning errors, anticipate problems, identify opportunities to improve cashflow or provide a basis for negotiating short-term funding from a bank.

Generally, when seeking external funding, the time horizon covered by projections should be equal to or greater than the period for which the funding is needed. The greater the amount of funding required and the longer the period of exposure for the provider of these funds, the more comprehensive must be the supporting projections and plan.

Typically, a computer-based model for short-term cashflow uses assumptions on sales, costs, credit, funding etc. to produce monthly cashflow projections for up to a year ahead. The initial assumptions can be readily altered to evaluate alternative scenarios. For example, the model could be used to explore the extent to which future sales could be increased whilst holding bank borrowings within predetermined limits; to assess the effects on cashflow of varying sales, costs or credit terms; or to determine the likely short-term funding requirements for a business.

Once assumptions on sales, expense payments etc. have been established, a model can be used to produce the cashflow projections which, in turn, indicate the likely future cash balances or banking requirements.

However, the quality of these projections will be completely determined by the standard and reliability of the underlying assumptions. For example, if forecasts for sales, credit terms, inventory levels, capital expenditure or costs are unrealistic or inadequately researched, then the value of the model's output is greatly diminished. An impressive set of projections is of little benefit if unsupported by experience or research, or based on mere speculation. In fact, they could be very damaging, or even destroy the business.

2.5. Planning to Forecast

Before using a computer model for short-term cashflow forecasting, a manager or entrepreneur should:

➢ Decide the central purpose of the exercise (internal planning and control, negotiate a loan etc.).

➢ Identify the target audience (directors, bank manager etc.)

➢ Set the time intervals and horizon (e.g. monthly for twelve months)

➢ Establish the level of detail required.

➢ Check that all the necessary key assumptions and data are to hand and have been adequately researched.

➢ Compile opening balances for all items which will involve cashflows within the forecasting period.

➢ Think through the likely impact of the critical assumptions on the cashflow projections.

If necessary, prepare preliminary forecasts to confirm their overall direction and consider the underlying strategic issues relating to sales, funding, costs, inventory (*stocks*), receivables (*debtors*) etc. As a guide, sales forecasts and receivable/payable *(debtor/creditor)* terms are likely to have the most profound impacts on short-term cashflows. The Quik-Plan facility within Cashflow Plan is ideal for producing *first-cut*, high-level cashflow projections.

When preparing cashflow projections covering a specified time horizon, say, twelve months, it could be vital to also produce projections for shorter intervals, for example, weeks or even days, for the initial months. This arises because cash inflows and outflows are unlikely to be evenly distributed between the weeks or days within any specific month. As a consequence, monthly projections may fail to disclose significant transient cashflow problems. For this reason, Cashflow Plan incorporates a facility to allow users to forecast cash inflows and outflows on a weekly basis for the initial three months covered by its projections.

If cashflow projections are required for a period exceeding twelve months, PlanWare - Invest-Tech's range of integrated multi-year planners, **Exl-Plan**, should be a considered. These Excel-based planners cover time horizons of up to seven years ahead. Further details from the PlanWare website at http://www.planware.org/exlplan.htm

2.6. Planning Pitfalls

When preparing cashflow projections, be aware of the dangers of:

- Overstating sales forecasts
- Underestimating costs and delays likely to be encountered
- Ignoring historic trends or performances by debtors etc.
- Making unduly-optimistic assumptions about the availability of bank loans, credit, grants, equity etc.
- Seeking spurious accuracy whilst failing to recognize matters of strategic importance.

These problems can arise as the result of a lack of foresight or knowledge, or because of excessive optimism. They can lead to under-estimation of the cash required to sustain or develop a business with potentially disastrous consequences.

When forecasting bank requirements and preparing cashflow projections, realistic views should always be taken about future prospects. There is often merit in compiling "worst" case projections to complement "most likely" or "best" forecasts and to accept that the "worst" case might occur and to plan accordingly. Note that Cashflow Plan offers extensive facilities for doing sensitivity analyses. See Section 6.8 Doing Sensitivity Analyses and Section 6.9 Viewing What-If Tables for further information.

2.7. Reviewing Projections

Once the cashflow projections have been prepared, they should be critically examined and used as a management tool to control and improve the business's expected cash position. Issues which might be examined include the following:

- Increasing sales (particularly those involving cash payments).
- Reducing direct and indirect costs and expenses.
- Deferring discretionary projects which cannot achieve acceptable cash paybacks.
- Increasing prices to slow payers.
- Reviewing the payment performances of customers.
- Becoming more selective when granting credit.
- Seeking 'down payments' or deposits.
- Reducing the amount of credit given to customers.
- Improving systems for billing and collection.
- Improving systems for paying suppliers.
- Establishing and adhering to sound credit practices.
- Using more pro-active collection techniques and adding late payment charges or fees where possible.
- Increasing the credit taken from suppliers.
- Negotiating extended credit from suppliers.
- Making prompt payments only where worthwhile discounts can be secured.

> ➢ Reducing inventory (*stock*) levels and improving control over work-in-progress.

> ➢ Selling off or returning obsolete inventory.

> ➢ Utilizing factoring or discounting facilities to accelerate receipts from sales.

> ➢ Deferring or re-staging major capital expenditures.

> ➢ Using alternative financing methods, such as leasing, to gain access to the use (but not ownership) of productive assets.

> ➢ Re-negotiating bank facilities to reduce charges and/or extend repayment periods.

> ➢ Selling off surplus assets or entering into sale and lease-back arrangements

> ➢ Deferring dividends or raising additional equity.

This checklist is built into the Cashflow Improver (Section 6.12) which is dynamically linked to Cashflow Plan's projections and can be used to identify and quantify areas where cash flow might be improved and to specify targets and action programs for monitoring and review. The projections within Cashflow Improver are automatically updated whenever Cashflow Plan recalculates or rolls forward or the Sensitivity Analysis Tool is used.

Once a preliminary set of cashflow projections have been prepared using Cashflow Plan, key variables can be flexed to explore the impact of 'what-ifs' on net cashflow and funding requirements. See Section 6.8 Doing Sensitivity Analyses and Section 6.9 Viewing What-If Tables for further information.

2.8. More about Planning

Preparing a set of cashflow projections is only a means to an end. Once a projections have been compiled, they should be regularly updated and compared with the results being achieved. The *roll-forward* facility within Cashflow Plan is ideal for this purpose as it allows users to compile rolling, regularly-updated projections with little effort once the initial projections have been prepared.

While the presence of up-to-date cashflow projections cannot guarantee success, the absence of any forecasts or reliance on low-grade projections can often lead to unexpected cash shortages with adverse consequences for the development, or even survival, of a business.

Users with limited financial expertise are urged to work closely with their professional advisers when using Cashflow Plan.

An expanded version of this section is available as a white paper at the PlanWare site at http://www.planware.org/papers.htm

This also contains other informative white papers dealing with business plan preparation, strategic planning, managing working capital, business idea generation etc.

Full details of PlanWare - Invest-Tech's business and financial planning software are also available at the PlanWare website along with access to demos, trial versions and purchase routes.

If cashflow projections extending beyond the one-year horizon covered by Cashflow Plan are required, the **Exl-Plan** range of financial planners should be considered. Details at http://www.planware.org/exlplan.htm

3.   Introducing Cashflow Plan

3.1. Introducing Cashflow Plan

This general appreciation of Cashflow Plan covers the following topics:

Cashflow Plan is an advanced, spreadsheet-based, financial modeling system for preparing comprehensive cashflow projections for twelve months ahead (six months with Free version). It can handle any type of business, with annual sales ranging from about $50,000 up to $100 million, engaged in manufacturing, distribution or services.

Based on a user's assumptions, Cashflow Plan compiles integrated financial projections – cashflows, income statements (*profit & loss accounts*), balance sheets & ratios - for a year ahead on a monthly basis and for the initial three months on a weekly basis. It produces numerous management and financial reports along with charts of key variables that can be displayed on the screen or printed.

3.2. Versions of Cashflow Plan

Six primary versions of Cashflow Plan are available as follows:

Free for high-level, short-term projections for companies, sole traders or partnerships. Projections are confined to six months (including 12 initial weeks). This is a useful tool in its own right and an ideal introduction to the rest of the Cashflow Plan range. Distributed as freeware.

Micro for new & very small companies, sole traders or partnerships. Most basic full version of Cashflow Plan covering 12 months (including initial 12 weeks). Handles one main sales/cost group. Distributed as shareware and commercial software.

Lite for new & small to medium-sized companies, sole traders or partnerships. Handles two main sales/cost groups and includes greater detail than Micro. Distributed as shareware and commercial software.

Plus for new & medium to large companies. Handles four main sales/cost groups and includes greater detail than Lite. Distributed as shareware and commercial software.

Super for new & substantial companies. Handles six main sales/cost groups, includes greater detail and includes more tools and facilities than Plus. Distributed as shareware and commercial software.

Ultra for new & substantial companies. Handles ten main sales/cost groups and includes greater detail than Super. Distributed as shareware and commercial software.

A registered user wishing to switch to a different version of Cashflow Plan should contact PlanWare - Invest-Tech for details of very attractive trade-up charges etc. at info@planware.org

All versions of Cashflow Plan can handle either UK/International or US/Canadian accounting formats and terminologies. Different currency symbols ($,£ etc.) and denominations (units, 000s, millions or billions) can be used.

Cashflow Plan requires Excel for Windows releases 5, 7, 8, 95, 97, 2000, XP or higher. Files created with the commercial version of Cashflow Plan are compatible upwards and downwards with all these releases provided that the user is licensed to use Cashflow Plan on more than one PC. The commercial license for Cashflow Plan restricts the use of Cashflow Plan to a single PC or network node. The only exception is where a registered person uses a registered copy of Cashflow Plan on a desktop PC and, exclusively, on their own notebook computer.

3.3. Scope of Cashflow Plan

Cashflow Plan comprises a series of integrated worksheets residing within the main workbook file. Projected cashflows, income statements (*profit & loss accounts*), balance sheets and ratio analyses are generated for the twelve months together with full-year totals. It also generates weekly projections for the initial three months.

Output from Cashflow Plan can be printed or viewed on a monitor. This includes the following:

- Over twenty pro-forma reports containing assumptions, income statements (*profit & loss accounts*), cashflow projections, balance sheets, performance reviews and summaries. These are detailed in Appendix 2 - Lists of Reports & Charts

- Numerous charts showing key projections, ratios etc. as detailed in Appendix 2 - Lists of Reports & Charts.

- An eleven-page Textual Summary Report containing a summary of the projections in textual form with embedded values and tables (***Output | Textual Summary Report**). *Not applicable to Free.*

- *Cashflow Improver* to help identify scope for improving cash flow (Section 6.12).

- *Report for Consolidation* which can be used in conjunction with the Cashflow Plan Consolidator to generate consolidated (rolling) projections for a holding company (Section 6.13).

3.4. Facilities & Features of Cashflow Plan

Once loaded, Cashflow Plan automatically extends Excel's menu system and adds its own toolbar.

Cashflow Plan contains dozens of pre-formatted and protected worksheets incorporating thousands of formulae, assumption values etc. Its facilities and features include the following:

- Extensive on-line help - refer to Section 1.4 Help System for further details.

- Multiple safeguards to protect formulae etc. and help prevent accidental changes being made to worksheets. Refer to Section 5.3 Protecting Your Work.

- Facilities for inserting constant and varying monthly values and for entering assumptions based on seasonal patterns etc. specified by the user. Refer to Section 5.6 Fast Entry of Assumptions.

- Comprehensive set of tailored toolbar buttons. Refer to Section 5.7 Cashflow Plan's Toolbar and List of Toolbar Buttons near the very front of the manual.

- Quik-Plan to enable a user produce *first-cut* cashflow projections quickly (i.e. within about 10 minutes). Refer to Section 6.4 Using Quik-Plan.

- *Error trapping* to advise when certain types of calculation errors arise. Refer to Section 6.6 Avoiding Calculation Errors and to Appendix 6 - Calculation Error Messages.

- Utility to enable a user to continually monitor up to five critical projection values based on user-specified performance criteria. Refer to Section 6.7 Using Range Limits. ***Not applicable to Free, Micro or Lite***.

- Selective *what-if* or sensitivity analysis. Refer to Appendix 5 - Guidance on Entering Assumptions.

- Sensitivity analysis tool for globally changing selling prices, volumes, direct costs and overhead expenses for each of the twelve months. Refer to Section 6.8 Doing Sensitivity Analyses. ***Not applicable to Free or Micro.***

- Automatically generated 'what-if' tables which display the impact of possible incremental changes in receivables (*debtors*), payables (*creditors*) and inventory (*stocks*) on projected monthly cashflows. Refer to Section 6.9 Viewing What-If Tables. ***Not applicable to Free, Micro, Lite or Plus.***

- Initial twelve-week cashflow forecasts derived from monthly cashflow projections. Refer to Section 6.10 Making Short-Term Cashflow Projections.

- Facility to roll forward the monthly projections and simplify the preparation of updated cashflow projections which continually look twelve months ahead. Refer to Section 6.11 Rolling Forward Projections.

- Full access to worksheets and formulae to facilitate customization and expansion. Refer to Section 7 Changing Cashflow Plan.

3.5. Assumptions Handled by Cashflow Plan

Cashflow Plan handles a very wide variety of assumption variables and financial functions. Many of these can be expanded or altered by the user as explained in Section 7 Changing Cashflow Plan in order to embrace existing spreadsheet-based data or to accommodate special user requirements.

3.5.1. Sales, Cost, Inventory & Expense Assumptions

The range of sales, cost, inventory and overhead expenses assumptions handled by Cashflow Plan Ultra (most powerful version in the Cashflow Plan range) include:

- Monthly sales forecasts for fifty product/market subgroups within ten main sales groups that can be defined by the user.

- Facilities for specifying the cost of materials/goods in percentage terms for each of the ten main sales groups; and for setting finished goods and material inventory (*stock*) targets for each main group.

- The direct labor headcount (*manpower*) can be specified along with eleven other user-definable direct/variable cost categories for each of which separate credit terms (up to four months) can be set.

- Almost forty user-definable categories of overhead expense for each of which credit terms (up to four months) can be specified.

See Section 3.2 Versions of Cashflow Plan for more information on the Cashflow Plan range.

3.5.2. Fixed Asset, Investment & Financing Assumptions

The range of fixed asset, investment and financing assumptions handled by Cashflow Plan Ultra (most powerful version in the Cashflow Plan range) include:

- Fixed asset assumptions and calculations include provision for handling depreciation (based on original cost or declining balance), leases and additions/disposals.

- Separate interest rates can be set for cash balances, short-term (*overdraft*) and long-term debt and for deferring interest receipts and payments.

- Facilities for increasing and decreasing long-term debt; assigning it between short- and long-term liabilities; and for making loan repayments inclusive or exclusive of interest.

- Handling intangible asset purchases and amortization; investment write downs (or appreciation) and purchases of new investments; and accounting for minority interests.

- Share issues, dividend declarations and payments, corporation tax provisions and payments.

See Section 3.2 Versions of Cashflow Plan for more information on the Cashflow Plan range.

3.5.3. Credit & Input/output Tax Assumptions

The range of credit and input/output tax assumptions handled by Cashflow Plan Ultra (most powerful version in the Cashflow Plan range) include:

- Provision for setting different credit terms (up to 6 months ahead) for each of the ten main sales groups and their related purchases of materials or goods for resale.

- Capacity to temporarily override cashflows relating to calculated values for receivables and payables.

- Facilities to defer the cash payments relating to many categories of monthly expense, capital expenditure, dividends etc. for up to four months ahead.

- Handling input/output taxes include sales taxes, value added tax (VAT), goods and services tax (GST) and other similar taxes which are applied to sales and purchases.

- Different sales/output tax rates can be set for each of the ten main sales groups.

- Where taxes apply to inputs (such as VAT and GST), there are facilities for setting different tax rates for trading inputs & capital expenditure inputs; for specifying tax payment months; and for paying tax on an invoice or cash-received basis.

See Section 3.2 Versions of Cashflow Plan for more information on the Cashflow Plan range.

4. Loading Cashflow Plan for First Time

These procedures in the sub-sections below explain how to install and load Cashflow Plan for the first time with Windows 95/98/NT/2000/XP and Windows 3.1. They should be followed by users who have not completed Very Quick Start described near the front of the manual.

To uninstall Cashflow Plan, select Uninstall within the Cashflow Plan Application Group if using Windows 3.1. For W95/98/NT/2000/XP, press Start and then select Settings, Control Panel, Add/Remove Programs, and Cashflow Plan.

In the event that it is planned to re-install Cashflow Plan (due to new version, upgrade etc.) and if the files CASHWORK.XLS or CASHTEST.XLS (created when Cashflow Plan was originally installed) contain useful data, these files should be relocated or renamed before re-installation commences.

When being loaded for the first time, Cashflow Plan needs 16 Mb of disk space to enable it to automatically create backup copies (CASHWORK.XLS and/or CASHTEST.XLS) during set up. If this space is not available, Cashflow Plan will skip their creation.

Note that Cashflow Plan must always be installed from supplied installation disk(s) or via a downloaded installation file. It will not operate correctly if it is installed by simply transferring a Cashflow Plan workbook file from one PC to another.

4.1. Installation of Cashflow Plan (Windows 95/98/NT/2000/XP)

When Cashflow Plan starts loading, Excel may display a dialog about macros and viruses. If Cashflow Plan was secured from a reliable source or directly from PlanWare - Invest-Tech, press the Enable Macros button. Note that Cashflow Plan will not load properly if the Disable Macros button is pressed. As loading progresses, a further dialog may appear about the location of macros. This can be disabled or ignored.

If using Excel 2000 (or higher) make sure that security is set to Medium (via **Tools | Macro | Security | Security Level**) before loading Cashflow Plan. If it needs to be reset, close and reopen Excel for the reset to take effect.

Installation takes only a few minutes. The procedure is as follows:

1. Close all other applications.

2. Confirm that at least 16 Mb of space is free on the hard disk to which Cashflow Plan will be installed.

3. Insert the Cashflow Plan Product Disk in a disk drive and use **Start | Run** to run the executable file CASHPLAN.EXE by entering A:\CASHPLAN.EXE at the Open prompt (replace A: by B: if appropriate). Follow on-screen instructions to install Cashflow Plan's files into the appropriate folders. If Cashflow Plan was acquired by downloading from the Internet to a temporary folder, the downloaded executable file should be run and its on-screen instructions followed to install Cashflow Plan's files into the appropriate folders.

4. When installation has finished, go to the Cashflow Plan menu within the Programs Menu and review any indicated README file.

5. Load Excel and open the main Cashflow Plan workbook file CASHPLAN.XLS located in the folder specified during installation. During loading, follow on-screen prompts (e.g. enable macros) and then wait a few moments while copies of Cashflow Plan are created. These copies, CASHWORK.XLS and CASHTEST.XLS, should be used as the primary working copy and for experimentation respectively. CASHPLAN.XLS should be carefully retained as the original master copy.

Note: If Cashflow Plan failed to detect the correct size of the screen display being used, use ***Setup | Change Default Zoom Value**.

This completes installation of Cashflow Plan. If desired, close CASHTEST.XLS and exit Excel, or proceed immediately to Section 5 Getting Started with Cashflow Plan.

4.2. Installation of Cashflow Plan (Windows 3.1)

Installation takes only a few minutes. The procedure is as follows:

1. Close all other applications.

2. Confirm that at least 16 Mb of space is free on the hard disk to which Cashflow Plan will be installed.

3. Insert the Cashflow Plan Product Disk in a disk drive and use the Run option within File Manager or Program Manager to run the executable file CASHPLAN.EXE by entering A:\CASHPLAN.EXE at the prompt (replace A: by B: if appropriate). Follow on-screen instructions to install Cashflow Plan's files into the appropriate sub-directories.

    If Cashflow Plan was acquired by downloading from the Internet to a temporary sub-directory, the downloaded executable file should be run and its on-screen instructions followed to install Cashflow Plan's files into the appropriate sub-directories.

4. Once installation is complete, go to the Cashflow Plan Application Group and review any displayed README file.

5. Load Excel and open the main Cashflow Plan workbook file CASHPLAN.XLS located in the sub-directory specified during installation. Once loaded, follow on-screen prompts and then wait a few moments while copies of Cashflow Plan are created. These copies, CASHWORK.XLS and CASHTEST.XLS, should be used as the primary working copy and for experimentation respectively. CASHPLAN.XLS should be carefully retained as the original master copy.

Note: If Cashflow Plan failed to detect the correct size of the screen display being used, use ***Setup | Change Default Zoom Value**.

This completes installation of Cashflow Plan. If desired, close CASHTEST.XLS and exit Excel, or proceed immediately to Section 5 Getting Started with Cashflow Plan.

5. Getting Started with Cashflow Plan

5.1. Getting Started with Cashflow Plan

This section contains basic exercises (5.2 Familiarization Exercises) to introduce Cashflow Plan's main features and facilities.

It also explains the following matters:

> 5.3 Protection of cells, sheets etc.
>
> 5.4 Printing
>
> 5.5 Zoom settings
>
> 5.6 Fast entry of assumptions
>
> 5.7 Cashflow Plan's toolbar
>
> 5.8 Freezing titles
>
> 5.9 Changing view of reports
>
> 5.10 Miscellaneous hints and tips.

5.2. Familiarization Exercises

To become familiar with the basics of Cashflow Plan, follow the procedures in the sub-sections below.

When running Cashflow Plan with W95/98/NT/2000/XP, it is best to place the taskbar at the bottom of the screen in order to improve the view of reports etc.

5.2.1. Familiarization - Part 1

1. Reload Excel with the previously-created Cashflow Plan file called CASHTEST.XLS. This file contains specimen assumptions that can be used for experimentation etc. and, being a copy of the original, its values etc. can be readily altered.

2. Take the Quik-Tour (***Cash Help | Quik-Tour**) to get an overview of Cashflow Plan and its facilities and layout.

3. Run the cursor across the menu bar - **File, Edit** etc. and note that Cashflow Plan has added several new menus (***Assumptions, *Protection** etc.).

4. Click the *Sales* worksheet tab (or the "MA" toolbar button) to go to the monthly assumptions report for sales forecasts etc. Note that assumption values (shown in blue) should be entered or altered only within the rectangular, shaded, boxed-in areas opposite the ->> or <<->> arrows. Values shown in black on a white background are formulae and these are normally locked (protected).

5. Try adding or changing some of the supplied assumption values for sales and recalculate (***Tools | Calculate All & Check**) to check the model's integrity and to update all the monthly and full-year

reports. Note that Cashflow Plan always uses manual calculation instead of Excel's default automatic calculation setting.

6. Use the ***Assumptions** menu, worksheet tabs and toolbar buttons (especially "<-" and "-.>") to view other assumption reports. Change assumption values as desired and periodically recalculate with the ***Tools | Calculate All & Check** menu command to utilize Cashflow Plan's error-trapping facilities.
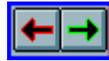
5.2.2. Familiarization - Part 2

1. Change or add more assumptions and check the Key Cashflow Projections Report (***Output | Key Projections**) and Textual Summary Report (***Output | Textual**), or click the *Key* and *Text* worksheet tabs, to see the consequences of changing assumptions. Note that monthly assumption reports contain calculated values as well as assumption values. These values feed into the monthly and full-year output reports - income statements (*profit & loss accounts*), cashflows etc. - which are located immediately to the right of the monthly output reports.

2. Experiment with Cashflow Plan's facilities, within the Assumptions menu, for entering series of assumption values within rows. These can also be accessed using toolbar buttons. Refer to Section 5.6 Fast Entry of Assumptions for details. They enable a user to:

   ▪ Enter a constant monthly assumption value

   ▪ Enter an assumption value which can be increased either arithmetically, geometrically, seasonally or pro-rata across the months.

   ▪ Clear a row of monthly assumption values.

   Note that assumption entry facilities only operate within the boxed-in areas assigned to assumption values.

3. Use the "M" and "J" toolbar buttons to mark the cursor's location, visit other locations and then jump back to the marked location.

4. Use menus, worksheet tabs or buttons (on certain sheets and on the toolbar) to view output reports, charts etc.

5. Use Cashflow Plan's ***Print** menus or print-related buttons to print assumption and output reports.

6. Experiment with the sensitivity-analysis facility in the *Sens* worksheet (***Tools | Sensitivity Analysis**) by entering percentage changes for key variables and recalculating. Note that these changes temporarily over-ride existing assumptions within Cashflow Plan. View their effects in the Textual Summary Report (*Text* worksheet) and in the charts. Press the "Zeroise Factors" button to revert to the original projections. See Section 6.8 Doing Sensitivity Analyses for a more detailed description of the sensitivity-analysis facility. ***Not applicable to Free or Micro.***

7. Try rolling forward all the assumptions and projections by one month (***Tools | Roll Forward Steps**) and review the various adjustments needed to complete the roll forward. See Section 6.11 Rolling Forward Projections for a more detailed description of this facility.

8. View the Cashflow Improver in the *Improver* worksheet to identify and plan where cash flows could be improved (Section 6.12).

9. If dealing with subsidiaries, view the Report for Consolidation (Section 6.13) and explore the Consolidator Guide document. ***Not applicable to Free, Micro, Lite or Plus.***

10. Review the contents of the Quik-Start task list (***Cash Help | Quik-Start**) at the *Start* worksheet tab. This contains an overview of the tasks involved in preparing comprehensive cashflow projections.

5.3. Protecting Your Work

To minimize the possibility of corruption of formulae, without restricting the potential for expansion or tailoring, Cashflow Plan contains extensive safeguards to protect and lock ranges, worksheets and workbooks. These can be removed by experienced users.

Users should never alter Cashflow Plan's toolbar, buttons, dialog boxes, macro modules, range names or worksheet names. If these are altered in any way, either by accident or design, PlanWare - Invest-Tech cannot accept any responsibility for support or give assistance in the restoration of a modified file. It is the responsibility of the user to ensure that a fully intact copy of Cashflow Plan is always available as a backup or fall back.

Do not rename a Cashflow Plan XLS file using Explorer or FileMgr as this will cause the file to 'lose' all references to its toolbar. Instead, use Excel to load the file and then save it via Excel with the desired new name.

The best way to protect a model is to:

1. Make regular use of Cashflow Plan's error-trapping facilities (***Tools | Calculate All & Check** or the "C" button) to check for any possible errors connected with formulae and data entry - see Section 6.6 Avoiding Calculation Errors for further information.

2. Make frequent back-up copies of error-free files using incrementing file names e.g. PLAN-1.XLS, PLAN-2.XLS, PLAN-3.XLS and so on.

To minimize possible disruption to formulae etc., Cashflow Plan contains the following protection facilities:

▪ When Cashflow Plan loads, all its worksheets are automatically protected.

▪ Cashflow Plan's facilities for entering rows of assumption values (via ***Assumptions** or toolbar buttons) will not operate if they are initiated while the cursor is located at a locked cell. Unlocked values are shown in blue and located in rows opposite ->> or <<->> arrows.

▪ As supplied, all cells within Cashflow Plan are locked with the exception of unlocked values located inside the rectangular, shaded boxed-in areas assigned to assumption values within assumption reports.

▪ Selected cell ranges can be locked or unlocked using the options within the ***Protection** menu or the corresponding buttons on the toolbar. Locked cells cannot be changed and their values are black colored on a white background. Values in unlocked cells are colored blue on a cream background whenever Cashflow Plan facilities for unlocking cells are used.

▪ The ***Protection** menu includes options for protecting individual sheets or for protecting all worksheets simultaneously.

- The ***Setup | Clear All Assumption Reports** or **Clear Current Assumption Report** menu options will only clear unlocked assumption values within Cashflow Plan's assumption reports (as well as unlocked cells in the column used for the opening balance sheet in the Monthly Balance Sheets). These facilities will not clear protected assumptions within assumption reports and will not remove any formulae or text within these reports. As this approach could lead to a failure to remove all assumptions, Cashflow Plan automatically checks, after it has attempted to clear reports, whether all assumptions have been successfully removed.

- A warning is issued if all assumption values have not been removed when clearing all assumption reports. If Cashflow Plan issues a warning message about being unable to clear all assumptions, systematically check through all assumption reports for uncleared formulae and text within the assumption areas.

In theory, either Excel's or Cashflow Plan's workbook protection facilities could be used to prevent accidental changes to formulae. Unfortunately, this also restricts the functioning of Excel's and Cashflow Plan's menus and leads to error messages etc. when invoking various menu options or buttons. In practice, the ***Protection | Protect All Worksheets** menu option is the most satisfactory method of protecting Cashflow Plan.

Some formulae within Cashflow Plan contain references to a hidden worksheet called *Workcalc*. It contains miscellaneous calculations and setup data and can be viewed via *Format | Sheet | Unhide*.

5.4. Printing

Cashflow Plan's ***Print** menus and its print-related toolbar buttons allow users to group reports for batch printing as well as to print individual reports.

The default orientation is portrait for most of Cashflow Plan's reports. Usually, it is more satisfactory to print reports with this orientation and, if necessary, to subsequently enlarge them using a photocopier rather than to print with landscape (with *Page Setup Scaling* set to Fit to 1 page wide) and then assemble and duplicate reports dispersed over several sheets.

Cashflow Plan's ***Setup** menu contains options for toggling the default size of printed pages for all its reports between the US Letter and international *A4* sizes.

How to handle printer memory problems: Cashflow Plan's boxed-in assumption areas are shaded to aid identification etc. If, when printing assumption reports, the printer indicates that it has run out of memory, the simplest solution is to remove this coloring from all the boxed-in areas within assumption reports. If, in other circumstances, the printer runs out of memory, break up the 'problem' report by inserting a page break at an appropriate row.

How to handle the appearance of ######: When viewing reports on screen or in print, ###### symbols signify a cell overflow due to the large numbers. Only consider widening columns as a last resort because of the adverse impact on the width of printed reports. Instead, try the following options first:

- Increase the zoom value for the report in the expectation that the cell overflows only arise on the screen and not in the printed report.

- Reduce the number of decimal places displayed.

- Remove any bold formatting from the 'problem' numbers.

- Change number formatting to remove the comma separator (as in 1,000,000).

There is an option in the ***Setup** menu to specify whether empty rows (containing values totaling to zero) are printed within output (but not assumption) reports. This is very effective at suppressing unused variables. This

facility complements Excel's outlining facilities that can be used to hide detailed rows within assumption reports. It does not operate if a report is being printed via the 'Print this sheet' toolbar button.

5.5. Zoom Settings

As Cashflow Plan loads, it detects the size of monitor's display being used and automatically adjusts Excel's custom zoom (***View | Zoom Custom Magnification**) to display each of Cashflow Plan's reports with the optimal magnification. This is based on the following display widths:

Maximum Possible Window Widths (Points)	Default Zoom Value (%)
< 600	60
600 (corresponds to 800*600 display)	75
> 600	90

Cashflow Plan's initial zoom value can be restored at any stage using ***Setup | Revert to Default Zoom Value**. The default zoom value can be changed via ***Setup | Change Default Zoom Value**.

The ***Setup** menu and toolbar both offer facilities to zoom into and out from the currently-active Cashflow Plan worksheet in increments of 10%.

5.6. Fast Entry of Assumptions

To complement Excel's facilities for entering data series, Cashflow Plan also includes facilities (accessible via the ***Assumptions** menu and toolbar buttons) for fast entry of assumption values across rows as follows:

- Clearing a row of assumptions.

- Entering a constant value across a row.

- Entering an initial value and incrementing it by a specified fixed value.

- Entering an initial value and incrementing it by a specified percentage.

- Entering a single value and allocating it in equal amounts across the remaining periods.

- Entering a single value and having it allocated, based on a seasonal index, across all twelve monthly periods. To use this facility, the cursor must be located within Assumption Reports Nos. 1 to 3.

These facilities can only operate inside the boxed-in, rectangular assumption areas within the monthly assumption reports.

5.7. Cashflow Plan's Toolbar

When Cashflow Plan loads, it automatically loads its own toolbar along with Excel's standard bar. This may cause the message "*Cashflow Plan is resetting toolbars, please wait a minute or so*" to display during loading.

If all Cashflow Plan's toolbar buttons cannot be displayed across the top of the screen (due to a screen display restriction), the toolbar can be dragged onto the worksheet to become a rectangular-shaped floating toolbar.

The buttons on Cashflow Plan's toolbar should never be modified or re-positioned within the toolbar.

Do not rename a Cashflow Plan file using FileMgr or Explorer as this will cause the file to 'lose' all references to its toolbar. Instead, use Excel to load the file and then save it with the desired new name.

See List of Toolbar Buttons near the front of the manual for details. To see a button's hint, slide the mouse pointer slowly over the button.

<u>Notes about possible problems relating to Cashflow Plan's toolbar:</u>

1. Cashflow Plan's toolbar is automatically reset every time an Cashflow Plan file is renamed. Very occasionally, it may lose track of file names and either cease to work or automatically load another Cashflow Plan file. Reset the toolbar by means of ***Tools/Setup | Reset Toolbar Buttons**. Note that this process can take a minute or so to complete.

2. If more than one copy of Cashflow Plan is loaded at any one time, there will be a delay during loading while Cashflow Plan's toolbar is reset for the second copy. Once loaded, the toolbars will automatically maintain their focus on the active window. If, for any reason, the Cashflow Plan toolbar does not appear when accessing a report, use ***Setup | Reset Toolbar Buttons.**

3. If a copy of Cashflow Plan is loaded, after having run a copy of Cashflow Plan with the same file name but located within a different folder, the tool bar buttons may not work. The solution is to save the loaded file with a new name, close it and then reload it.

4. Refer to the accompanying README.DOC file for directions if any of the following events occur:

   - If, after changing file names or Excel file formats, Cashflow Plan displays the message "*Cashflow Plan could not find its customized toolbar. Refer to accompanying README file for further info*."

   - If Cashflow Plan hangs or freezes when displaying the message "*Cashflow Plan is resetting toolbars, please wait*" in the status bar (at the bottom of Excel's Window).

5.8. Freezing Titles

The Freeze Report Titles option within the ***Setup** menu (also accessible via a toolbar button) is a handy way to simultaneously lock the tiles and variable descriptions for all report and to automatically move the cursor to the top left corner of each worksheet.

5.9. Changing Views of Reports

The ***Setup | Change View of Reports** menu option allows a user to globally change the display of the formula bar, gridlines and row/column headers. These are automatically applied to all worksheets except those used for charts, Quik-Plan and other facilities.

5.10. Miscellaneous Hints & Tips

This section contains a selection of operational hints and tips for users. It complements the more extensive advice at the regularly-updated *Frequently Answered Questions for Users* at the PlanWare website at http://www.planware.org/cashfaq2.htm

Linking into Word

Once projections have been created using Cashflow Plan, **Edit | Copy & Paste** and/or **Edit | Copy & Paste Link** can be used to insert Cashflow Plan tables and charts into a Word-created document. The simple tables and charts in Cashflow Plan's Textual Summary Report are especially suitable for pasting.

Reducing Detail

If Cashflow Plan appears to demand too much or too detailed information, it will run satisfactorily with minimal data - have a look at the limited amount of data required to use the Quik-Plan facility at the *Quik* worksheet. Aside from supplying a balanced opening balance sheet (in worksheet *Bal*), a user has complete discretion on the amount of data entered into the monthly assumption reports. The Cashflow Plan facility for suppressing the printing of empty rows (***Tools/Setup | No Empty Rows Printed**) can be used to make its output reports more concise and relevant.

Renaming File Names

Do not rename an Cashflow Plan file using FileMgr or Explorer as this will cause the file to 'lose' references to the Cashflow Plan toolbar. Instead, load the file and save it with a new name. If these references do get lost, use ***Tools/Setup | Reset Toolbar Buttons**. Note that this reset process can take a minute or so to complete.

Moving Assumption Values

Never use Cut & Paste to relocate/move assumption values within an Cashflow Plan report. This can disrupt formulae. Instead, use Copy & Paste and then delete the original values.

Cashflow Plan Stalls on Loading

Very exceptionally, Cashflow Plan may appear to hang when loading - the screen goes blank while the hour glass flickers and Excel's status bar displays an Cashflow Plan message. Most probably, Cashflow Plan is resetting its toolbar. Wait a minute or so and then Cashflow Plan's *Front* worksheet should appear.

Closing Cashflow Plan

On a "slow" PC, the closing of an Cashflow Plan file may take a few minutes while sizeable temporary files connected with Excel's Undelete etc. are removed. This may also be a signal that the hard disk needs defragmentation. If Microsoft Outlook is being used and closing is very slow, check that Excel files are excluded from its Journal.

Adding Comments to Values

Use Excel's cell notes or comments (**Insert | Note** or **Insert | Comment**) to annotate assumption values. This can be very useful for explaining the basis or origin of assumptions. It is best to place all comments in column A.

Understanding Formulae

Use Excel's auditor (**Tools | Auditing**) to trace formulae precedents and dependents within a worksheet and the Range Finder (with Excel 97 and higher) to color-code referenced cells. Another trick for tracing calculations is to enter a large, rounded number (e.g. 1000) as an assumption and then follow it through the formulae within relevant worksheets.

6. Using Cashflow Plan

6.1. Using Cashflow Plan

Cashflow Plan is licensed for use on one computer or at one network node belonging to the organization/individual named on the front worksheet. However, a registered user is permitted to use a single registered copy of Cashflow Plan on a desktop PC and, exclusively, on their own notebook computer.

Licenses for multiple copies of Cashflow Plan are available from PlanWare - Invest-Tech. <u>DO NOT</u> copy Cashflow Plan for unlicensed users or sites, associated organizations, clients, customers, etc. This is expressly prohibited and could result in prosecution. <u>DO NOT</u> alter the contents of the front worksheet or macros under any circumstances. Use of Cashflow Plan indicates acceptance of these terms and conditions. For details, see License Agreement near front of the manual.

This section is relevant to all new users. It offers general advice on using Cashflow Plan (6.2 Starting to Use Cashflow Plan) and explains how to use it to prepare financial projections for different types of businesses (6.3 Structuring a Model). It also discusses the following:

- Using Quik-Plan (Section 6.4)
- General model-building procedure (Section 6.5)
- Avoiding calculation errors (Section 6.6)
- Using range limits (Section 6.7)
- Doing sensitivity analyses (Section 6.8)
- Viewing 'what-if' tables (Section 6.9)
- Making short-term cash projections (Section 6.10)
- Rolling forward projections (Section 6.11).

6.2. Starting to Use Cashflow Plan

The topics below explain how to erase existing values from Cashflow Plan and outline approaches to the gathering of assumptions for inclusion in Cashflow Plan:

6.2.1. Erasing Existing Values

Rows which are not needed in Assumption Reports <u>MUST NOT</u> be deleted. Instead, they should be left empty or with zero values. Depending on Excel's set-up, zeros may appear as empty spaces. Note that Cashflow Plan offers the option to suppress the printing of unused rows in output reports (***Setup | No Empty Rows Printed**). Use can also be made of Excel's outlining facilities to hide unused rows within Cashflow Plan.

To ensure that formulae etc. are not accidentally erased, regularly check that ***Protection | Protect All Worksheets** is enabled. To remove protection from a single report, use ***Protection | Unprotect This**

Worksheet or its corresponding toolbar button. To remove protection from an assumption range, use ***Protection | Unlock Range** or its corresponding button.

To erase assumption values within an unlocked range (blue numbers within the boxed-in, rectangular, shaded areas), use the DEL key, or select the range of assumptions to be deleted and use either ***Assumptions | Clear Assumptions** or the corresponding toolbar button.

To erase the contents of monthly assumptions reports, use the ***Setup | Clear All Assumption Reports** or **Clear Current Assumption Report** menu commands as appropriate. Note that these commands ignore (a) locked assumption values within assumption reports, (b) formulae[1] (either locked or unlocked) within these reports and (c) text (either locked or unlocked) within these reports. As this approach could lead to a failure to clear all assumptions, Cashflow Plan automatically tests whether all assumptions have been successfully removed and will issue a warning message if it finds that any assumption values have not been removed.

At this point, it may be worthwhile creating a copy of Cashflow Plan with its assumptions removed as a template file (*.XLT) in the Cashflow Plan subdirectory (with Windows 3.1). If using Excel 7 or higher with Windows 95/98/NT/2000/XP, save the template in Microsoft Office's Templates\Spreadsheet Solutions folder. Refer to Excel's Online Help for guidance on creating and using templates.

6.2.2. Gathering & Entering Assumptions

Note that a user's assumptions are entered directly into the monthly Assumption Reports only. The Output Reports contain extensive formulae which generate the projections. The only exception is the opening balance sheet in Monthly Balance Sheets which must be entered directly into this report.

When starting to prepare a new set of cashflow projections for a business, there are likely to be some significant gaps in the information needed to plan effectively. It may be necessary to review historic accounts and budgets to derive basic cost or sales data; to prepare detailed sales forecasts; to review payment patterns for receivables and payables (*debtors and creditors*); to identify alternative scenarios; to make detailed manpower and expense projections; to consider short-term funding issues etc.

Cashflow Plan can assist this process by helping to pose the right questions and providing feedback on the financial implications of possible outcomes. However, bear in mind that, ultimately, Cashflow Plan is only a high-powered calculating and printing system and that its output will only be as sound as the underlying assumptions. Refer to Section 2.6 Planning Pitfalls for advice on preparing projections.

On the first occasion that Cashflow Plan is used to produce *real* projections for a business, curtail the level of detail used for monthly assumptions relating to sales, expenses etc. and concentrate initially on producing summarized monthly cashflow projections.

For example, start by entering just single rows of assumptions for sales and use only a few rows for *high-level* direct and overhead expenses etc. As all other sales, cost and overhead assumptions will have been previously set to zero, the range of assumptions will be manageable and it should be straight-forward to follow these through the various formulae and reports. Review the initial results and then progressively add greater detail.

Tip: A printout of all Assumption Reports with all assumptions erased can be a very useful aid to collecting assumption data.

---

[1] These formulae could be entered by the user to link into values in other worksheets e.g. like =xxx!sum(xxxx), or they could be simple arithmetic formulae like =2*3/4. Note that a simple cell entry like =2 is treated as a formula and it will not be removed.

6.3. Structuring a Model

Cashflow Plan can be structured to suit manufacturing, distribution or service businesses. Guidelines on using Cashflow Plan to suit different types of businesses are contained in Appendix 3 - Adapting Cashflow Plan to Different Business Types.

For new users, the best approach is to start using Cashflow Plan exactly as supplied and only start making progressive changes according as experience is acquired and needs become clearer. Refer to Section 7.2 Making Simple Changes for guidance on making very simple but highly effective modifications to Cashflow Plan.

For most users, it is not practicable (or desirable) to alter the layout of Cashflow Plan's reports by moving or radically changing rows etc. Instead, where special reports are required for presentation purposes or to conform to in-house layouts, the simplest solution is to create separate, specially-created reports in empty rows immediately below the supplied reports. See Section 7.2.6 Changing Report Layouts for detailed guidance.

Note that Cashflow Plan offers the option to suppress the printing of unused rows in output reports (***Setup | No Empty Rows Printed**). Use can also be made of Excel's outlining facilities to hide unused rows within Cashflow Plan.

The variable descriptions shown in blue and opposite the <<->> arrows in column A of the monthly assumption reports are designed to be changed by the user. Provided that their meanings remain consistent with the formulae built into Cashflow Plan, other (locked) variable descriptions could also be changed to suit a particular business's terminology.

If substantial changes must be made to Cashflow Plan and only limited spreadsheet expertise is available, it may be desirable to contact PlanWare - Invest-Tech about undertaking this work - see Section 8.2 Model Development Services.

6.4. Using Quik-Plan

Quik-Plan is an unique facility within Cashflow Plan for (a) producing simple *quick and dirty* cashflow projections for twelve months ahead or (b) generating *first-cut* forecasts which can be refined and fine-tuned from within the more detailed monthly Assumption Reports.

The entire process of producing financial projections is remarkably fast if Quik-Plan is used to generate the projections and these are subsequently printed in summary form via the Textual Summary Report. This approach could be particularly useful to professional advisers, banks and other organizations providing front-line support to new and small enterprises.

See also Appendix 4 - How Quik-Plan Handles Assumptions.

6.4.1. Outline Procedure for using Quik-Plan

Initiating Keystrokes

Enter basic data about the business, projection start date, currency etc.	ALT+S, B
⇓	
Assign names to sales groups (*Not applicable to Free or*	ALT+S, G

Micro)	
⇓	
Enter the title for the new model	ALT+S, E
⇓	
Save the model as a new file	ALT+F, A
⇓	
Use Quik-Plan	ALT+L, Q
⇓	
Save projections	ALT+F, S
⇓	
View output reports & charts	ALT+U, ALT+C
⇓	
Review/refine assumptions	ALT+A
⇓	
View/print Textual Summary Report (*Not applicable to Free*)	ALT+U, X ALT+N, X

6.4.2. Procedure for setting up Cashflow Plan prior to using Quik-Plan

To get started with Quik-Plan, load Excel and open an existing Cashflow Plan file (e.g. a copy of CASHWORK.XLS). Immediately, save this file with a new file name and then undertake the following preparatory tasks:

1. Enter basic information about the business via the Basic Information dialog (***Setup | Enter Basic Model Info**) as follows:

- ▪ Enter the business's (not the software licensee's) name;

- ▪ Indicate whether the business is a corporation or sole trader/partnership;

- ▪ Specify the report formats, terminologies and spellings as either US/Canadian or UK/International.

- ▪ Specify the year relating to the first month to be covered by the projections;

- ▪ Select the first month to be covered by the projections;

- ▪ Specify the currency symbol to be used throughout the model (preferably use a single character such as $, £ etc.);

- ▪ Indicate the primary currency denomination (units, 000s, Mln or Bn) to be used;

- ▪ Enter a short description of the term to be used within the model for input/output taxes. For example, enter "Sales Tax" for sales taxes; "VAT" for Value Added Tax; "GST" for Goods & Services Tax and so on. Do not include the quote marks.

- ▪ After pressing Done, this data will be automatically entered throughout the model and the appropriate months and year will be entered in all report headings, graph titles etc.

2. Describe the main sales groups most appropriate to the business[2] (***Setup | Assign Names to Sales Groups**). ***Not applicable to Free or Micro.***

3. Give the new model a title, for example *First Attempt*, using ***Setup | Enter Model Title**. This title will be inserted automatically in the footer of each printed report.

6.4.3. Procedure for Using Quik-Plan

As the procedure for using Quik-Plan is virtually self-explanatory, the following guidelines are intended to serve only as a general introduction:

1. To access Quik-Plan, select the *Quik* worksheet tab or ***Tools | Quik-Plan**.

2. Use the displayed button to clear any existing values in the Quik-Plan Assumptions Report.

3. Enter assumptions for the year. Refer to Appendix 4 - How Quik-Plan Handles Assumptions to see how Quik-Plan handles these assumptions and makes some additional assumptions to complete the projections.

4. Once assumption values have been entered into the Quik-Plan Assumptions Report, press *Run Quik-Plan* and wait a minute or two while Cashflow Plan removes all existing assumptions from the Assumption Reports; inserts the Quik-Plan assumptions; adds its own assumptions; undertakes several recalculations; and updates the output reports. Note that Quik-Plan will abort this process if it detects any pre-existing assumption values within Assumption Reports that could not be cleared (see Section 6.2.1 Erasing Existing Values).

5. Make a backup copy using the **File | Save with Backup** menu command.

This completes the Quik-Plan process and a full set of cashflow projections, including a balanced opening balance sheet, will have been compiled for the twelve months. Charts and reports showing all the detailed projections can be viewed or printed. For a quick synopsis of the projections, go to the Key Cashflow Projections Report (***Output | Key Projections**) or to the Textual Summary Report (***Output | Textual Summary Report**).

---

[2] These can relate to major product categories, market segments, customer groups, different input/output tax (sales taxes, GST, VAT etc.) rate categories etc. Select definitions that are most relevant from the perspective of forecasting sales, material costs, credit terms etc. Detailed sales forecasts can be entered for user-definable subgroups within each main group.

Assumptions introduced by means of Quik-Plan can be changed or expanded within the Assumption Reports. For guidance on this, go to the notes dealing with the entry of assumptions within Section 6.5.2 Detailed Guidance on using Cashflow Plan to Generate Projections. If desired, set range limits for the model (***Setup | Set Range Limits for Message**) for key criteria. The range limits message can be turned off/on via ***Setup | Toggle Display of Range Limits Message**. (See Section 6.7 Using Range Limits). ***Not applicable to Free or Micro or Lite.***

6.5. Model-Building Procedure

The procedures for using Cashflow Plan to make projections for a particular business are summarized in Section 6.5.1 and explained in detail in Section 6.5.2.

6.5.1. Summary of Procedure for Generating Projections

	Initiating Keystrokes
Load Excel with a copy of Cashflow Plan and save it with a new file name	ALT+F, A
⇓	
Remove all existing assumptions	ALT+S, C
⇓	
Enter basic data about the business, projection start date, currency etc.	ALT+S, B
⇓	
Assign names to sales groups (*Not applicable to Free or Micro*)	ALT+S, G
⇓	
Give the new model a title	ALT+S, E
⇓	
Enter monthly assumptions	ALT+A, S etc.
⇓	
Enter opening balance sheet	ALT+U, B
⇓	
Final recalculation	ALT+L, A
⇓	
Save projections	ALT+F, A
⇓	
View reports & charts	ALT+U, ALT+C
⇓	
Print reports & charts	ALT+N, ALT+R

6.5.2. Detailed Guidance on using Cashflow Plan to Generate Projections

To use Cashflow Plan to make projections for a particular business, proceed as described in this four-step procedure:

1. Set up Cashflow Plan

2. Enter Monthly Assumptions

3. Enter Opening Balance Sheet

4. Complete the Projections

Note that calculation errors should be ignored until the procedure for Entering Opening Balance Sheet has been completed.

Regularly use **File | Save with Backup** to make file copies when building a model. In addition to saving the current file, make copies using incrementing file names e.g. ABC-1.XLS, ABC-2.XLS and so on. This will help ensure that if a serious error arises within a model, it will always be possible to revert to an earlier error-free version.

1. Setting up Cashflow Plan

1. Load CASHWORK.XLS and immediately re-save it using an appropriate new file name e.g. as XYZ-1.XLS.

2. Enter basic information about the business via the Basic Information dialog (***Setup | Enter Basic Model Info**) as follows:

- Enter the business's (not the software licensee's) name;

- Indicate whether the business is a corporation or sole trader/partnership;

- Specify the report formats, terminologies and spellings as either US/Canadian or UK/International.

- Specify the year relating to the first month to be covered by the projections;

- Select the first month to be covered by the projections;

- ▪ Specify the currency symbol to be used throughout the model (preferably use a single character such as $, £ etc.);

- ▪ Indicate the primary currency denomination (units, 000s, Mln or Bn) to be used;

- ▪ Enter a short description of the term to be used within the model for input/output taxes. For example, enter "Sales Tax" for sales taxes; "VAT" for Value Added Tax; "GST" for Goods & Services Tax and so on. Do not include the quote marks.

3. After pressing Done, this data will be automatically entered throughout the model and the appropriate months and year will be entered into all report headings, graph titles etc. If using multiple currencies, empty rows below assumption reports can be used to handle mixed currencies and their conversion into the model's base currency (refer to Section 7.2 Making Simple Changes to Cashflow Plan).

4. Describe the main sales groups most appropriate to the business[3] (***Setup | Assign Names to Sales Groups**). *Not applicable to Free or Micro.*

5. Give the new model a title, for example *First Attempt*, using ***Setup | Enter Model Title**. This will be inserted automatically in the footer of each printed report.

6. Use the ***Setup | Clear All Assumption Reports** menu command to remove all unprotected assumption values throughout the model. Cashflow Plan will advise if it detects any assumptions that could not be automatically cleared (see Section 6.2.1 Erasing Existing Values for further information).

2. Entering Assumptions

1. Use the ***Assumptions | Sales (No. 1)** menu command to go to Assumption Report No. 1 for Sales & Finished Goods Inventory (*Stock*) Targets.

2. Enter monthly assumptions in this report and then work through the remaining monthly Assumption Reports. Concentrate initially on entering approximate or *high-level* values with a view to refining them once a full picture starts to emerge. For further assistance, refer to Appendix 5 - Guidance on Entering Assumptions and Appendix 7 - Glossary of Terms.

3. Make use of Cashflow Plan's special facilities for entering constant and variable monthly values (***Assumptions | Constant Assumptions** etc. and their respective toolbar buttons).

4. Save the file frequently and make regular back-up copies.

5. Explanatory notes can be added to individual assumptions using Excel 5's **Insert | Note** facility or **Insert | Comment** in Excel 97 or higher.

6. Use blank rows below Assumption Reports to build up detailed schedules, lists etc. and then use simple cell references to plug their total values into the appropriate assumption areas (see Section 7.2.3 Plugging New Variables into an Existing Variable for further information on this technique).

7. Note that calculation errors may be indicated whenever the model recalculates using the ***Tools | Calculate All & Check** menu command or the "C" button. These can be safely ignored until all the monthly assumptions and the opening balance sheet data have been entered.

---

[3] These can relate to major product categories, market segments, customer groups, different input/output tax (sales taxes, GST, VAT etc.) rate categories etc. Select definitions that are most relevant from the perspective of forecasting sales, material costs, credit terms etc. Detailed sales forecasts can be entered for user-definable subgroups within each main group.

3. Entering Opening Balance Sheet

Enter the outstanding data in unlocked (boxed-in) cells for the opening monthly balance sheet (***Output | Balance Sheets**).

Note that the total opening inventories (*stocks*) is based on values in column F in Assumption Report No. 2 (worksheet *DirCost*) for (a) the total *Desired inventory of materials/packaging or goods for resale* and (b) *Total finished goods inventory* (**Not applicable to Free, Micro or Lite**).

Monthly Assumption Report No. 6 (worksheet *RecPay*) should be used to phase out the opening balances for certain items that appear in the opening balance sheet. If the totals being phased out in this report differ from the opening balances, Cashflow Plan will report an error whenever it recalculates using the ***Tools | Calculate All & Check** menu command. If this happens, return to Report No. 6 and revise the assumption values in rows showing ERR instead of arrows in column B so that their total equates to the indicated opening value.

After entering all the necessary opening values, press F9 (or the crossed "C" button) and make sure the opening balance sheet (at worksheet *Bal*) is balanced by viewing the row for *CHECK balance sheets balance* immediately below the opening balance sheet. If this does not show a zero opening balance, review values entered for the opening balance sheet.

Once the opening balance sheet balances, use the ***Tools | Calculate All & Check** menu command to calculate and ensure that no calculation errors arise (see Section 6.6 Avoiding Calculation Errors). Note that Cashflow Plan's error trapping system only works when the ***Tools | Calculate All & Check** menu command or the "C" button are used to recalculate.

4. Completing the Projections

1. Re-save the file and make a further back-up copy.

   Initial 12-month, cashflow projections have now been completed and the appropriate reports and charts can be viewed on the screen or printed. Monthly assumptions can be fine-tuned and the resultant projections can be subjected to critical examination to determine their veracity etc. Be watchful for the following:

   a. Undesired blips in the cashflow projections arising from unsound assumptions about the phasing out of opening accounts receivable and payable (*debtors and creditors*) (see Notes 1 and 2 in the Cashflow Projections).

   b. Data-entry errors like entering 300 instead of 3,000.

   c. Negative or excessively low/high production requirements in worksheet *DirCost* arising from unrealistic changes in inventory levels as specified in worksheet *Sales*. **Not applicable to Free, Micro or Lite.**

2. If desired, set range limits for the model (***Setup | Set Range Limits for Message**) for key criteria. The range limits message can be turned off/on via ***Setup | Toggle Display of Range Limits Message**. (See Section 6.7 Using Range Limits). **Not applicable to Free, Micro or Lite.**

3. Save the updated model and make a back up with a new file name.

This completes the procedure for preparing the cashflow projections. At this stage, assumptions can be further refined or Cashflow Plan's sensitivity-analysis facility can be used to explore alternative scenarios (See Section 6.8 Doing Sensitivity Analyses).

Cashflow Plan's other planning tools can also be utilized:

- Making weekly cashflow projections covering the initial three months (See Section 6.10 Making Short-Term Cash Projections)

- ▪ Rolling forward projections one month at a time (See Section 6.11 Rolling Forward Projections)

- ▪ Reviewing the automatically generated 'what-if' tables (See Section 6.9 Viewing What-If Tables). *Not applicable to Free, Micro, Lite or Plus.*

- ▪ Using the Cashflow Improver (See Section 6.12 Improving Cash Flows).

- ▪ Consolidating projections for several subsidiaries (See Section 6.13 Consolidating Projections). *Not applicable to Free, Micro, Lite or Plus.*

6.6. Avoiding Calculation Errors

When using Cashflow Plan, it is important to ensure that no calculation errors arise; that its two sub-models produce identical results; and that no imbalances occur in the opening or projected balance sheets. Note that a temporary imbalance will always occur in the opening balance sheet until all key values have been entered in the monthly Assumption Reports as well as in the opening balance sheet.

Because Cashflow Plan does not use floating values to balance its balance sheets, it is very sensitive to formulae errors and consequently all structural changes to the model must be applied correctly. For example, if an additional monthly cashflow-related item is introduced into the model as a new assumption row, changes may be needed in the monthly income statement, cashflow and balance sheet output reports. For further guidance, see Section 7.3 Making Complex Changes.

Cashflow Plan displays on-screen messages when it detects calculation errors when the ***Tools | Calculate All & Check** menu command or "C" button are used. These messages, detailed in Appendix 6 - Calculation Error Messages, cover the most likely error situations. In addition, Cashflow Plan opens an online help window describing the detected error and explaining how it can be resolved. This facility can be turned on/off using ***Setup | Toggle Help for Calculation Errors**.

The following general procedure should help locate and eliminate errors:

1. Scan the rows showing *CHECK balance sheets balance* immediately below the monthly Balance Sheets for imbalances. Make sure that the opening balance sheet balances correctly. If it does not show a zero opening balance at the third decimal place, review all the values entered for the opening balance sheet.

2. Check the right-hand column of the Check Balances Report in the CHECK worksheet (***Output | Check**) for any differences between the key values computed by Cashflow Plan's two sub-models.

3. Examine Assumption Report No. 6 (worksheet *RecPay*) for errors and revise the assumption values in rows showing ERR instead of arrows in column B.

4. If necessary, save the model with a new file name. Then, locate the source of the error by progressively removing all assumption values and recalculating using the ***Tools | Calculate All & Check** menu command or "C" toolbar button.

5. If the error cannot be located or easily fixed, the best option may be to revert to an error-free, backup copy of the model.

6.7. Using Range Limits

Cashflow Plan incorporates a facility which allows a user to specify key performance criteria and to be alerted as soon as any specified range limits are exceeded. *Not applicable to Free, Micro or Lite.*

Values for one or more of the criteria can be entered via the ***Setup | Set Range Limits for Message** menu option. If the value of any criterion is set to zero, then it is ignored. The criteria are as follows:

1. **Maximum monthly debt/equity ratio (%)**

    Use this to warn if the debt/equity ratio for any month exceeds a specified limit. For example, a user might wish to be informed if this ratio exceeded 75%. In this case, a value of 75 would be specified.

2. **Minimum monthly current asset ratio (times)**

    If this ratio falls below unity (1.0), then the business might not be able to meet its short-term liabilities from its current assets. As an example, a user might wish to be informed whenever this ratio falls below 1.1 times. In this case, a value of 1.1 would be specified.

3. **Maximum monthly current asset ratio (times)**

    A high ratio might signify that the business is accumulating surplus cash and/or building up excessive receivables (*debtors*) or inventories (*stocks*) relative to its current liabilities. As an example, a user might wish to be informed whenever this ratio goes above 2.5 times. In this case, a value of 2.5 would be specified.

4. **Peak closing monthly cash surplus (value)**

    Use this criterion to secure a warning whenever projected monthly cash balances exceed a specified value.

5. **Peak closing monthly cash deficit (value)**

    Use this criterion to be warned whenever projected monthly cash deficits exceed a specified value. For example, this value may represent the maximum permissible overdraft or short-term credit limit. If it is desired to secure a warning whenever cash balances fall to zero, enter a very small negative value, for example -0.001.

The range limits message can be turned on/off via ***Setup | Toggle Display of Range Limits Message**.

Once the display has been turned on, the range limits message will appear automatically (if any criteria exceed range limits) immediately after either the ***Tools | Calculate All & Check** menu command or "C" toolbar button have been used.

If the display has been turned off, the range limits message can be displayed at any time via ***Tools | View Range Limits Message**.

6.8. Doing Sensitivity Analyses

This section explains how to use Cashflow Plan to conduct sensitivity analyses and to create alternative scenarios as follows:

> 6.8.1 General Approach
>
> 6.8.2 Sensitivity Analysis Tool. *Not applicable to Free or Micro.*

6.8.1. General Approach

Once *base case* assumptions have been entered into a Cashflow Plan model, these can be readily altered to explore alternative scenarios.

From the perspective of exploring cashflow sensitivities, the most significant changes are likely to cover the following:

- ▪ Changes in efficiency of labor and/or plant.

- ▪ Variations in fixed and/or variable costs.

- ▪ Changes in credit terms for receivables and payables (*debtors and creditors*) and delayed payment of opening balance sheet items.

- ▪ Changes in inventory (*stock*) levels.

- ▪ Postponement of discretionary capital expenditure or non-essential operating expenses.

- ▪ Use of leasing to acquire capital items instead of outright purchase.

- ▪ Deferment of loan repayments, switching to lower cost, longer-term borrowings etc.

- ▪ Replacement of loans by equity.

- ▪ Variations in sales volumes or prices. If the effect of increasing selling prices is being explored from within the monthly Assumption Report No. 1 (worksheet *Sales*), it may be necessary to reduce the material cost percentages in Assumption Report No. 2 (worksheet *DirCost*) to offset the increased sales due to higher prices. Unless this is done, material costs will rise in line with increased sales.

For further guidance on measures for improving cashflow, see Section 2.7 Reviewing Projections. Also, review the output of the 'what-if' tables (***Tools | What-If Tables**) to see the impact of incremental changes in inventory, receivable and payable (*stock, debtor and creditor*) levels on cashflow. ***Not applicable to Free, Micro, Lite or Plus.***

When using Cashflow Plan to conduct sensitivity analysis, the suggested procedure for producing alternative scenarios is as follows:

1. Complete development of a *base case* model for the twelve months. Save it and print the key assumptions and output reports.

2. Review the *base case* outcome and identify 3-4 key assumption variables which could be realistically changed and which might have the greatest impact on the cashflow projections.

3. Create a copy of the *base case* model with a new file name. Rerun the model with the alternative values for each new case and print out the key reports.

Excel's Scenario Manager can also be used to maintain multiple scenarios.

6.8.2. Sensitivity Analysis Tool

Cashflow Plan incorporates a powerful sensitivity-analysis tool. ***Not applicable to Free or Micro.***

This tool enables a user to temporarily override existing assumptions and to make global changes to the following key variables on a month-by-month basis for the year ahead:

- ▪ Sales volumes

- ▪ Sales prices

- ▪ Materials/packaging costs

- ▪ Overhead Expenses

Note that global changes will immediately update the short-term cashflow projections and will also modify the contents of the automatically created 'what-if' tables. ***Not applicable to Free, Micro, Lite or Plus.***

The sensitivity-analysis factors modify assumptions in exactly the same way as would be achieved by altering every single one of the underlying relevant assumptions directly. For example, if monthly sales volumes are increased by a specified percentage using its sensitivity factor, sales turnover would be increased by the same percentage as would be inventory (*stock*) levels, materials/goods purchases, direct costs (including direct labor), receipts/payments relating to input/output taxes (sales taxes, GST, VAT etc.), accounts

receivable/payable (*debtor and creditor*) levels etc. In contrast, an increase in selling prices would only increase sales turnover, input/output tax receipts and accounts receivable (*debtors*) while leaving costs, inventory (*stocks*) and accounts payable (*creditors*) all unchanged.

When using Cashflow Plan to carry out global sensitivity analysis, the procedure is indicated below.

1. Access the Sensitivity Analysis Factors Report in the *Sens* worksheet (***Tools | Sensitivity Analysis**). Insert values for the appropriate months expressed as percentage increases/decreases for sales volumes, selling prices, material costs and/or overhead expenses.

2. Press *Recalculate & Check*. When undertaking sensitivity-analysis calculations, Cashflow Plan makes selective adjustments throughout the model. As a consequence, some values in the monthly Assumption Reports may not sum correctly or be reconcilable with the original assumptions used. For example, total monthly sales may change in Assumption Report No. 1 but all of the underlying assumption values will remain unaltered.

3. To revert to the initial position, remove all the values in the Sensitivity Analysis Factors Report by pressing *Zeroise Factors*.

Cashflow Plan will signify if sensitivity analysis is in operation whenever the ***Tools | Calculate All & Check** menu command or "C" toolbar button are used.

6.9. Viewing What-If Tables

Once monthly projections have been compiled, Cashflow Plan automatically generates 'what-if' tables which show the impact on projected cashflows of incremental changes in working capital. ***Not applicable to Free, Micro, Lite or Plus.***

The 'what-if' tables are accessed via the *What_If* worksheet (***Tools | What-If Tables**). They comprise three sets of tables which indicate the impact of incremental changes in inventory, receivables and payables (*stocks, debtors and creditors*) on net cashflow and cash balances (deficits). Each set of tables shows the impact of the progressive changes in absolute terms and as deviations from the base case. It also contains a facility to allow the incremental changes to be phased in immediately, or progressively over a number of months (up to six) to give a more realistic assessment of the impact of the changes.

Note the following:

1. The assessments do not take account of any additional interest payments or receipts arising from changes in inventory, receivable or payable (*stock, debtor or creditor*) levels.

2. While the peak monthly cash surpluses and deficits take the changes in inventory, receivables and payables (*stocks, debtors or creditors*) fully into account, they are also influenced by other factors connected with trading, capital expenditure, funding etc. On this account, peak monthly surpluses or deficits may not move exactly in synch with the calculated changes in inventory, receivable or payable (*stock, debtor or creditor*) levels.

Any changes to the underlying monthly assumptions are immediately reflected in the 'what-if' tables as soon as Cashflow Plan recalculates (***Tools | Calculate All & Check**). Also, these tables are automatically updated whenever the sensitivity analysis tool at the *Sens* worksheet is used.

6.10. Making Short-Term Cash Projections

Once full-year projections have been compiled, monthly cashflow projections for the initial three months can be expanded into approximate weekly projections at the *STCash* worksheet (***Tools | Short-Term Cashflow Projections**).

This entails estimation of the percentage weekly distributions of key monthly cashflows. For example, in a non-cash business, cash outflows for payables (*creditors*) often peak during the first week or two of a month while cash inflows relating to receivables (*debtors*) may be concentrated towards the month end. These payment patterns can be reflected by setting the percentage distributions for each cashflow item (row) within the unprotected, shaded areas of the *STCash* worksheet.

Note that the total percentage distribution for each item (row) and each month must always equate to either 100% or 0% otherwise an error message ("% Error") will appear in column B for that item (row) as soon as the worksheet has been updated.

To clear existing percentage values, locate the cursor within the *STCash* worksheet and use ***Setup | Clear Current Assumption Report**.

To update values in the *STCash* worksheet , use ***Tools | Calculate Sheet**, or ***Tools | Calculate All & Check**, or the corresponding toolbar buttons.

6.11. Rolling Forward Projections

Cashflow Plan incorporates a facility to advance or *roll-forward* the twelve-month assumptions and projections one month at a time.

Roll forward works by advancing the original start month for projections by a single month. It then deletes the assumptions for the original first month and converts the original second-month assumptions into *new* first-month assumptions. This process is repeated for the remaining eleven months. The following example illustrates roll forward:

> If projections had been originally prepared for twelve months from March through to the following February, then the roll-forward facility would replace March's assumptions by April's and so on for the remaining months. This would create a new set of twelve-month projections running from April to the following March. Note that assumptions for the original twelfth month (i.e. February) would be retained for the new twelfth month (i.e. March).

The roll forward facility makes Cashflow Plan ideally suited for preparing regularly-updated cashflow projections. Because most assumptions are unlikely to change significantly between one month and the next, the task of updating assumptions and projections is greatly simplified.

Roll forward is assessable at the *Roll* worksheet or via ***Tools | Roll Forward Steps**. This worksheet contains a step-by-step guide to roll forward together with a simple table which highlights key cashflow projections immediately prior to roll forward alongside the latest post roll-forward values.

Before rolling forward, it is recommended that the current Cashflow Plan file be saved using a descriptive file name, e.g. CASH_MARCH_2002.XLS. Once the roll forward has been completed the file should be renamed, e.g. as CASH_APRIL_2002.XLS.

To roll forward, select the designated button at the *Roll* worksheet or the ***Tools | Roll Forward Projections** option.

Once roll-forward has been completed, the following items may need to be updated if relevant to the business:

1. Opening finished inventories (*stocks*) in the *Sales* worksheet. ***Not applicable to Free, Micro or Lite***.

2. Opening cost of finished goods inventories (*stocks*) in the *DirCost* worksheet. ***Not applicable to Free, Micro or Lite.***

3. Opening inventory (*stocks*) of materials or goods for resale in the *DirCost* worksheet.

The following items must be updated after roll forward irrespective of the type of business:

1. Opening values in the Balance Sheets at the *Bal* worksheet.

2. Phasing out of opening balance sheet items in monthly Assumptions Report No. 6 at the *RecPay* worksheet.

As the original assumptions for the *new* twelfth month will be identical to those for the *old* twelfth month, they should be reviewed carefully. Particular attention should be given to *once-off* items which will have been automatically replicated in the *new* eleventh and *new* twelfth months.

Finally, the original assumptions for other months, particularly for sales and major non-recurring expenses, may need to be revised in the light of recent experiences or updated trading conditions. To create accurate short-term projections, the percentage distributions for the short-term cashflow projections at the *STCash* worksheet may need to adjusted.

It is important to note that:

1. Assumption values which have been entered as *Supplementary Data & Calculations* in blank rows below Monthly Assumption Reports (between columns G and R) will be automatically rolled forward provided their cells are **unlocked** (using the "Unlock range" toolbar button or menu option within the *Protection menu).

2. Assumption values within **locked** cells will <u>not</u> be rolled forward.

3. While values based on formulae within **unlocked** cells will be rolled forward, the underlying formulae will not be relocated (i.e. not moved one cell to the left).

To see exactly how Cashflow Plan handles these additions during a roll forward, create an experimental copy of Cashflow Plan, add some test values (unlock them) and formulae within the *Supplementary Calculations & Data* area, and watch what happens to them when Cashflow Plan rolls forward.

6.12. Improving Cash Flows

Cashflow Plan incorporates a worksheet called **Improver** which contains a report **Cashflow Improver**. This dynamically updated report has been designed for use by managements to help identify and quantify areas where cash flow might be improved and to specify targets and action programs for monitoring and review.

The projections within Cashflow Improver are linked to projections elsewhere in Cashflow Plan and are automatically updated whenever Cashflow Plan recalculates or rolls forward or when the Sensitivity Analysis Tool is used.

6.13. Consolidating Projections

The Super and Ultra versions of Cashflow Plan incorporate a facility to help consolidate the monthly and full-year pro-forma financial projections generated by Cashflow Plan. This Consolidator is powerful and flexible and very easy and speedy to use on a regular basis. It uses the acquisition method of consolidation and is aimed at holding companies with wholly- or majority-owned subsidiaries rather than associates or minority interests.

The Super and Ultra versions of Cashflow Plan include a worksheet called **Con_** containing a **Report for Consolidation** along with two specialist Consolidator workbooks (CON*.XLS) using US/Canadian and UK/International formats respectively which include facilities for changing exchange rates and denominations and adjusting for inter-company trading and balances.

Note that projections within the **Report for Consolidation** are linked to projections elsewhere in Cashflow Plan and automatically updated whenever Cashflow Plan recalculates or rolls forward. This would facilitate production of consolidated rolling projections for a holding company.

For more information, see the separate Consolidator Guide (Word document) accompanying Cashflow Plan Super and Ultra, or available from the PlanWare website at http://www.planware.org/cashsupport.htm

7. Changing Cashflow Plan

7.1. Changing Cashflow Plan

Whilst many users will use Cashflow Plan exactly as supplied, others may wish to take advantage of their Excel expertise to tailor or extend it to meet specific requirements.

Sections 7.2 and 7.3 guide users on making simple and complex changes to Cashflow Plan respectively and Section 7.4 describes how Cashflow Plan can be extended to provide additional facilities for planning and managing a business.

Some general advice:

- Never delete or alter the supplied range or worksheet names or interfere with the macros supplied with Cashflow Plan.

- When starting to change a Cashflow Plan model, always work off a **copy** of an error-free version.

- Whenever a model has been changed or extended, always **fully test** it to ensure that the changes work as intended and have no undesirable knock-on consequences.

- When making large-scale changes, use ***Protection | Unprotect All Worksheets** to disable protection throughout the model, or use ***Protection | Unprotect This Worksheet** to remove protection from the current report.

- ***Protection | Unlock Range** can be used to unlock a selected range.

- Having removed protection to make changes within a workbook, **always restore protection** as soon as practicable.

Cashflow Plan incorporates six separate worksheets containing income statements (*profit & loss accounts*), balance sheets and Textual Summary Reports to handle its US/Canadian and UK/International format options. These formats are specified via ***Setup | Enter Basic Model Info** and, in effect, result in Cashflow Plan hiding the three unused worksheets. These can be unhidden by unprotecting the active worksheet (***Protection | Unprotect This Worksheet**) and then selecting **Format | Sheet | Unhide**.

The three US/Canadian worksheets contain critical formulae for detailed calculations relating to sales, costs, balances etc. whereas the UK/International worksheets contain formulae which, in most instances, simply refer back to the corresponding cells within the US/Canadian worksheets.

If a user wishes to change aspects of the US/Canadian worksheets, there is no necessity to follow through any changes to these worksheets into the UK/International worksheets. However, if a user wishes to change any of the three UK/International worksheets, it is essential that all changes should first be applied to the appropriate US/Canadian worksheets and then simply referenced within the UK/International worksheets. This method is essential because several reports which are common to both formats (e.g. Performance Review, Textual Summary Report and Summary as well as the *Charts* worksheet) draw on calculations and formulae within US/Canadian worksheets.

If Cashflow Plan is used to make multiple sets of projections, it may be worthwhile saving a suitably modified version of Cashflow Plan as a template file (*.XLT) in the Cashflow Plan subdirectory (with Windows 3.1). If using Excel 7 or higher with Windows 95/98/NT/2000/XP, save the template in Microsoft Office's Templates\ Spreadsheet Solutions folder. Refer to Excel's Online Help for guidance on creating and using templates.

Users should never alter Cashflow Plan's toolbar, buttons, dialog boxes, macro modules, range names or worksheet names. If these are changed in any way, either by accident or design, PlanWare - Invest-Tech cannot accept any responsibility for support or give support in the restoration of a modified file. It is the responsibility of the user to ensure that a fully intact copy of Cashflow Plan is always available as a backup or fall back.

7.2. Making Simple Changes

This section explains how very simple but __highly effective__ changes can be made to Cashflow Plan by users with only minimal expertise with Excel:

> 7.2.1 Changing the name of an existing variable
>
> 7.2.2 Entering new assumption rows
>
> 7.2.3 Plugging new variables into an existing variable
>
> 7.2.4 Extending the power of plugging in
>
> 7.2.5 Using formulae instead of values
>
> 7.2.6 Changing report layouts
>
> 7.2.7 Combining simple changes.

Note that the ***Setup | Clear All Assumption Reports** or **Clear Current Assumption Report** menu commands only remove assumption values within the shaded, unlocked cells within assumption reports. To use this facility after adding new assumption rows or new blocks of assumption values, the newly-added cells must be unlocked (using the ***Protection | Unlock Range** option or the unlock button) to enable their assumption values to be cleared by the foregoing commands.

If planning to extend Cashflow Plan and to use its roll forward facility, note that:

1. Assumption values which have been entered in blank rows below Monthly Assumption Reports (between columns G and R) will be automatically rolled forward provided their cells are **unlocked** (using the "Unlock range" toolbar button or menu option within the *Protection menu). Assumption values within **locked** cells will not be rolled forward.

2. Values based on formulae within **unlocked** cells will be rolled forward but the underlying formulae will not be relocated (i.e. moved one cell to the left).

7.2.1. Changing the Name of an Existing Variable

To change the name (but not the underlying context) of a locked variable, e.g. to replace the description of an expense item in the Assumption Report No. 3, follow the procedure below.

1. Get into the *Ohead* worksheet.

2. Go to the cell in question; unlock it (***Protection | Unlock Range** or unlock button).

3. Make the desired change.

4. Lock the cell again (***Protection | Lock Range** or lock button).

Repeat this procedure if the original description appears in any of the output reports and is not updated automatically using Cashflow Plan's built-in formulae.

7.2.2. Entering New Assumption Rows

It is a simple matter to insert new rows for assumptions within the existing boxed-in areas for accommodating sales assumptions. To ensure that the values in new rows are always embraced by SUM formulae etc., for the boxed-in area, do NOT insert new rows as replacement top or bottom rows.

Months:	1	2	3	4	5	6	7	8	9	10	11	12	12-Month Totals
Sales (£000):													
- Product A													fc
- Product B													fc
- Product C													fc
- Product D													fc
Total sales	fr	fr	fr	fr	fr	fr	fr	fr	fr	fr	fr	fr	fr

fr = SUM formulae embracing rows

fc = SUM formulae embracing columns

In the example above, new rows should be inserted between Product A and Product D. Note that additional SUM formulae (fc) for the twelve-month totals must be inserted for each new row.

7.2.3. Plugging New Variables into an Existing Variable

One of the easiest and most powerful changes that can be made to a Cashflow Plan model. This involves creating tables of values within some of the empty rows below an Assumption Report and then *plugging* their monthly totals into the pre-set assumption rows within the Report by means of simple addition or summing formulae.

For example, it is desired to expand assumptions relating to monthly sales for a particular sales group to accommodate monthly forecasts for, say, twenty individual products. To do this, follow the procedure below.

1. Go to **Assumption Report No. 1 (Sales)** and turn off protection for its worksheet (***Protection | Unprotect This Worksheet**).

2. In empty rows below the Report, add appropriate product description labels for each of the twenty products in column A and then enter monthly sales forecasts in columns G to R. Unlock these new assumption cells (using the "Unlock range" toolbar button or menu option within the *Protection menu) to ensure that their values are rolled forward.

3. Within the Assumptions Report, insert SUM formulae into one of the pre-set assumption rows (inside the boxed-in, shaded areas) for the sales group in order to total all the monthly values entered into the new rows.

4. Restore the worksheet's protection (***Protection | Protect This Worksheet**).

7.2.4. Extending the Power of Plugging In

Logical extensions of the use of simple formulae to plug into existing variables within a Cashflow Plan model include the following:

1. Inserting new worksheets to incorporate very detailed sales projections (for individual products, customers etc.). These could be summarized and plugged into the existing main sales groups using SUM formulae.

2. Using **Copy & Paste Special | Link** to pull aggregated data from another Excel file into the Cashflow Plan model.

3. Simply copying & pasting values into specifically designated blocks located below assumption reports within Cashflow Plan.

Very detailed or specialized reports could be created and their total values plugged into the rows and variables supplied with Cashflow Plan. The potential to expand Cashflow Plan in this way is virtually unlimited. For example, it could be used to incorporate parts explosions, lists of materials, detailed cost analyses, manning levels, capital expenditure schedules and much more.

7.2.5. Using Formulae Instead of Values

By inserting formulae instead of values in assumption rows, it is possible to reduce the number of values to be entered every time the model is altered. For example:

a. Formulae could be used to determine the production headcount (*manpower*) by relating planned production to projected labor output rates, working hours per month etc. As a result, every change in sales or inventories (*stocks*) would be reflected automatically in production headcount (*manpower*) levels.

b. A formula could be used to repeat a constant assumption value entered for the first month in the cells for each subsequent month.

The scope for using formulae is considerable. For example, they could be used to incorporate foreign currency exchange rates, seasonal factors and to determine output or sales on the basis of workdays per month.

7.2.6. Changing Report Layouts

Where special report layouts are needed for presentation purposes or to conform with in-house styles, the simplest solution is to insert additional worksheets containing these new reports. These reports can be laid out exactly as desired and they only require simple cell referencing formulae (e.g. +A10) to link back into cells within existing Cashflow Plan reports. This approach completely avoids the need to make any structural changes to Cashflow Plan's existing output reports. Note: The summary output report (*Summary*) is an example of this type of easily constructed report.

Using this approach, it is very simple to construct reports in foreign languages which utilize the same data as the underlying model.

7.2.7. Combining Simple Changes

The changes described above can be readily combined to make very substantial alterations to the supplied model and to turn Cashflow Plan into an extremely comprehensive and detailed planning tool.

A modified version of Cashflow Plan can be saved as a template file (*.XLT) in the Cashflow Plan subdirectory. If using Excel 97 or higher, save the template in the Program Files\Microsoft Office\Templates\Spreadsheet Solutions folder.

Note that, provided its integrity has not been compromised as result of modifying any supplied formulae, Cashflow Plan's facility for global sensitivity-analysis can be used to temporarily over-ride existing forecasts for sales volumes, sales prices, material costs and overhead expenses without having to manually change all the underlying detailed assumptions. ***Not applicable to Free or Micro.***

7.3. Making Complex Changes

The methods described in Section 7.2 Making Simple Changes should be used wherever possible in preference to making any of the following more complex changes:

> 7.3.1 General procedure for complex changes
>
> 7.3.2 Inserting a new main sales group
>
> 7.3.3 Inserting an additional monthly expense item
>
> 7.3.4 Inserting a new balance sheet item
>
> 7.3.5 Deleting a row
>
> 7.3.6 Changing column widths
>
> 7.3.7 Adding macros & range names.

To alter the basic structure, logic etc. of Cashflow Plan, proceed on a step-by-step basis with great care to avoid possible knock-on errors etc. For example, if a completely new type of variable needs to be added to a Monthly Assumption Report, it may also be necessary to change several Monthly Output Reports **as well as** the Full-Year Output Reports.

As it can take much more time to test changes than to make them in the first instance, complex changes should only be introduced when adequate time is available to fully test the altered model and to confirm that existing formulae have not been disrupted. Note: While Cashflow Plan's error-trapping facilities will help locate mathematical errors, they will never detect mistakes created by faulty logic etc.

Only users who are very familiar with both Cashflow Plan and Excel should undertake the structural changes described below. Substantial changes should be made only when strictly necessary. Workarounds based on the solutions described in Section 7.2 Making Simple Changes are likely to be much easier and quicker to implement. Where substantial changes are required, consideration should be given to engaging PlanWare - Invest-Tech to undertake the required modifications (Refer to Section 8.2 Model Development Service).

Cashflow Plan incorporates six separate worksheets containing income statements (*profit & loss accounts*), balance sheets and Textual Summary Reports to handle its US/Canadian and UK/International formats. These formats are specified via ***Setup | Enter Basic Mode Info** and, in effect, result in Cashflow Plan hiding the three unused worksheets. These can be unhidden by unprotecting the active worksheet (***Protection | Unprotect This Worksheet**) and then selecting **Format | Sheet | Unhide**.

The three special US/Canadian worksheets contain critical formulae for detailed calculations relating to sales, costs, balances etc. whereas the UK/International worksheets contain formulae which, in most instances, simply refer to the corresponding cells in the US/Canadian worksheets. If a user wishes to change aspects of the US/Canadian worksheets, there is no necessity to follow through any changes to these worksheets into the UK/International worksheets. However, if a user wishes to change any of the three UK/International worksheets, it is recommended that these changes should first be applied to the appropriate US/Canadian worksheets and then simply referenced within the UK/International worksheets. This approach is essential because several reports which are common to both formats (e.g. Performance Review, Textual Summary Report and Summary as well as the *Charts* worksheet) draw on calculations and formulae within US/Canadian worksheets.

7.3.1. General Procedure for Complex Changes

When making any substantial changes to Cashflow Plan, always adhere to the general procedure indicated below.

Use the Check Balances Report (*Check* worksheet) to help identify any errors resulting from changes. Also, refer to the *CHECK balance sheets balance* rows immediately below the Balance Sheet Reports to locate

possible errors. Compare the output of the altered model with that of the original to help locate errors and to check calculations and results.

1. Confirm that the initial model has no calculation errors.

2. Save **and back up** the original model before it is modified and give a new file name to the model that is about to be changed.

3. Think through the planned changes from a financial perspective by assessing their impacts on income statements, cashflows, balance sheets and ratio calculations and then assess their possible consequences for the model.

4. Complete major changes one at a time.

5. Test each change by using dummy values that can be readily recognized, for example, 1000.

6. Always recalculate using Cashflow Plan's ***Tools | Calculate All & Check** menu command or the "C" button in order to avail of its error-trapping facilities.

7. Eliminate errors as soon as detected and confirm that no calculation or formulae errors exist before starting the next change.

8. Check that the changes give the desired or expected results by experimenting with very large positive (and negative, where appropriate) values.

9. Save the modified version of Cashflow Plan as a template file (*.XLT) in the Cashflow Plan subdirectory. If using Excel 97 or higher, save the template in the Program Files\Microsoft Office\Templates\Spreadsheet Solutions folder.

7.3.2. Inserting a New Main Sales Group

Where the supplied main sales groups and their sub-groups are insufficient, an extra main sales group can be added to various assumption and output reports. The procedure is described below.

In many cases, it will prove much simpler to trade up to a more powerful version of Cashflow Plan which can handle up to ten main sales groups.

1. Insert new rows in the midst of every block of rows used for existing main sales groups within each Assumption and Output Report. This will ensure that values for the new group are automatically embraced by SUM formulae used to total values for the sales groups. When inserting new rows, always sure that they go into the same relative position within each block e.g. always the second one down or second last from the bottom.

2. Specify an appropriate description for the new group and enter assumption values for sales, inventory, labor, materials, input/output taxes (sales taxes, GST, VAT etc.) etc. into all newly-inserted assumption rows.

3. For newly-inserted rows which require formulae instead of assumption values, use Copy & Paste to copy formulae from an adjacent row either downwards or upwards into the new rows.

4. Enter test assumption values which are easily recognized. Then, check for errors and scrutinize the new rows and all relevant totals for possible errors or anomalies.

5. Check that totals in the Full-Year Output Reports are correct.

6. Add the new sales group to the relevant charts in the *Charts* and *Text* worksheets.

7.3.3. Inserting an Additional Monthly Expense Item

To insert an additional monthly expense item (where it is not practical to rename an existing expense item or to *plug into* an existing item), a new row must be inserted for the item in the appropriate Assumption Report as well as in the Cashflow Projections.

In many cases, it will prove much simpler to trade up to a more powerful version of Cashflow Plan which can accommodate a much greater range of expense items.

If, for example, it is essential to insert a new variable within a specific monthly overhead expense category (such as Operational Expenses, Management/Admin Staff Expenses etc.), proceed as indicated below.

1. Go to the Assumption Report for Overhead Expenses (*Ohead* worksheet) and remove its protection. Insert a new row immediately below an existing variable within the relevant overhead expense category. Enter the new variable's name and monthly values and indicate the expected credit period in column B.

2. If necessary, edit the first month's formula for total costs for the overhead expense category to embrace the new row and then copy it across the twelve months. Enter a SUM formula for the full-year totals for the new row.

3. Insert a new row in the Cashflow Projections Report immediately below the row for the pre-existing variable referred to in Point 1 above. Copy all the formulae in the pre-existing row downward into the newly created row.

4. The new expense item may also need to be included in the tax calculation formulae for inputs in Assumption Report No. 7 in the row entitled *Total tax on non-payroll expenses*.

5. If the new row relates to an additional employment category, it will be necessary to ensure that related payroll costs are included in the monthly income statements (*profit & loss accounts*) and that the formulae for calculating wages & salaries and payroll taxes/benefits in the Cashflow Projections are adjusted. Formulae in the Performance Review Report used to calculate average number of employees will also need to be revised. Note: Formulae for calculating payroll taxes/benefits in the Cashflow Projections extend from column G to hidden column S.

6. Finally, it may be necessary to make provision for the new row to be adjusted by the appropriate sensitivity-analysis factor for sales volumes, sales prices, material costs or overhead expenses. ***Not applicable to Free or Micro.***

7.3.4. Inserting a New Balance Sheet Item

To add a new balance sheet item, additional rows must be inserted in the appropriate Assumption Reports to accommodate the underlying assumptions. Additional rows containing formulae will be required in the monthly Balance Sheets. In addition, it may be necessary to alter formulae in the monthly and full-year Performance Reviews. The new item may also need to be included in the input/output tax (sales taxes, GST, VAT etc.) calculation formulae in Assumption Report No. 7.

7.3.5. Deleting a Row

Delete a row only where strictly necessary as this may require adjustments to numerous formulae in several reports. Instead, consider hiding the row or suppress its printing (using ***Setup | No Empty Rows Printed**).

In most circumstances, it is likely to be much simpler and quicker to create specially tailored reports as described in Section 7.2.6 Changing Report Layouts than to modify Cashflow Plan's existing output reports by deleting rows.

The procedure for deleting rows is indicated below.

1. Save the unaltered model.

2. Delete the first row, calculate using the F9 function key and then proceed to search column-wise for #REF signs.

3. Locate the first formula initiating an error, remove references to the deleted row in this formula and recalculate.

4. Continue this search process until the model is error-free as confirmed by the Check Balances Report (*Check* worksheet).

5. Delete the next row and repeat the foregoing procedure for locating and removing any errors.

7.3.6. Changing Column Widths

As an alternative to changing column widths, consider changing cell formats (by reducing decimal places, removing bold fonts or eliminating the punctuation used to indicate thousands as in 1,000) or use a larger currency denomination (e.g. Mln instead of 000s).

When changing column widths, apply the new widths consistently and bear in mind the need to accommodate the printing of reports. Do not change the widths of columns A to F.

7.3.7. Adding Macros & Range Names

Users with appropriate expertise can add their own macros to Cashflow Plan. The best approach is to insert additional modules to accommodate these macros. Take great care to ensure that they do not interfere with the supplied macros or range names. **The supplied macros must not be changed under any circumstances.**

If adding macros or range names, start these with an unique prefix e.g. "AA" to ensure that there are no conflicts with any names supplied with Cashflow Plan. Before adding macros etc. ensure that an error-free version of Cashflow Plan has been preserved. Always test and then double-test any additions/changes.

7.4. Extending Cashflow Plan

Cashflow Plan can be used without modification to create cashflow and financial projections for a business; assist with the preparation of budgets; or contribute to business planning exercises. It provides all the reports normally required for these purposes.

Cashflow Plan can be extended with little effort to perform other functions to assist the planning and management of a business. The following procedures are described:

7.4.1 Incorporating *actuals* with projections

7.4.2 Updating *projections* with *actuals*

7.4.1. Incorporating Actuals with Projections

Cashflow Plan can be extended to generate a detailed analysis of projections and *actuals* and to produce monthly and year-to-date totals and variance reports.

Note: This use of Cashflow Plan will conflict with its roll-forward facility unless duplicate models (files) are created once initial projections have been finalized. The first copy could be used for rolling forward and the second could be used to track performance by incorporating *actuals* alongside the original projections.

This extension to Cashflow Plan should use additional worksheets to accommodate separate reports for each month. Each monthly report should contain rows of variable descriptions derived from those used in Cashflow Plan's assumption and output reports. The following columns should be created for each monthly report:

- ▪ *Projected monthly values* obtained by means of simple cell references to sales and expense values within Cashflow Plan's assumption and output reports.

- ▪ *Actual monthly values* to be entered manually or imported.

- ▪ *Monthly variances* (absolute amounts and percentages) based on the projected and actual monthly values.

- ▪ *Cumulative projected values* derived by summing projected monthly values for the year-to-date.

- ▪ *Cumulative actual values* derived by summing actual monthly values for the year-to-date.

- ▪ *Cumulative monthly variances* (absolute amounts and percentages) based on cumulative projected and actual year-to-date values.

To create this system, only a basic understanding of Cashflow Plan and a moderate level of spreadsheet expertise are required.

If Cashflow Plan is being used to compare actuals with projections, its global sensitivity-analysis facility can still be used to flex assumptions and projections for the **remaining months** of the year without permanently disrupting any underlying assumptions. ***Not applicable to Free or Micro.***

7.4.2. Updating Projections with Actuals

Whilst Cashflow Plan was never intended to serve as a management accounting system, its projections can be updated by actuals using one of the two methods described below.

Note: This use of Cashflow Plan will conflict with its roll-forward facility.

The first and simplest method is to create a duplicate monthly Income Statements (*Profit & Loss*) Report which combines *actuals* year-to-date with *projections* for the remaining months of the year.   This straightforward task is explained below.

1. Save a copy of the unmodified model as a back up in case any unforeseen problems arise.

2. Use the space below the Income Statements (*Profit & Loss*) to create a duplicate copy of this report. Use a simple cell referencing formula to link the top left-hand cell in the duplicate income statement to the corresponding cell in the original income statement. Next, copy and paste this formula across columns (A to R) and downwards in order to create the duplicate report.

3. Next, enter SUM formulae into a full-year column to the right of the duplicated report to total the monthly values. If desired also insert new formulae for an *As % Sales* column.

4. Lock all the cells in the duplicate report.

5. The duplicate report should now be complete and any changes made in the original report will be automatically reflected in the duplicate.

6. As the year progresses, unlock and over-write the cell reference formulae in the appropriate column within the **duplicate** report by entering *actuals* abstracted from management accounts. Whenever the model recalculates, the full-year totals in the duplicate income statement report will contain a combination of *actuals* for the year-to-date and *projections* for the remaining months of the year.

7. Because none of Cashflow Plan's original formulae have been disrupted, monthly assumptions impacting on projections for the remaining months of the year can be updated at any stage to take account of recent performance trends and to give a more reliable indication of the likely out-turn for the full year.

The second method of updating projections with actuals involves overwriting assumptions within the monthly Assumption Reports by actuals that have been abstracted from monthly accounts.   Projections for the remaining months can then be updated in the light of experience or changing circumstances. With some

experience of overwriting and updating projections, it should be possible to make relatively accurate adjustments to the original assumptions for sales, costs etc. in order to reflect actual achievements. However, it is likely to be more difficult to tune the cashflow projections and balance sheets to reflect actual results because of interactions and complexity of the formulae and calculations involved.

8.   Support & Assistance

8.1. Support Policy

Cashflow Plan is supplied under license to users strictly on an as is basis. Once a user gets Cashflow Plan to load satisfactorily, PlanWare - Invest-Tech considers its role and commitment as supplier to have concluded. This limitation is due to the very open nature of Cashflow Plan and the difficulties involved in assisting users who may have altered Cashflow Plan, either intentionally or by accident. However, PlanWare - Invest-Tech will provide support to **registered bona fide** users for three months (and longer at PlanWare - Invest-Tech's sole discretion) to ensure that, in the unlikely event of problems arising, these are kept to the minimum and are quickly resolved. This support is primarily intended to cover the following:

- Initial macro failures.

- Calculation errors where the layout, logic, formulae, worksheet & range names and macros in Cashflow Plan have NOT been altered by the user.

- Guidance to users encountering unexpected results when entering assumptions in an unaltered model.

For general support queries about Cashflow Plan, refer to the page of Frequently Asked Questions within the PlanWare - Invest-Tech web site at http://www.planware.org/cashfaq2.htm

Before contacting PlanWare - Invest-Tech about a possible problem or error, a user should carefully check the manual for guidance. When seeking help from PlanWare - Invest-Tech, provide precise details of the events leading up to the difficulty; indicate the hardware system being used; and describe any changes made to Cashflow Plan. In some circumstances it may be necessary to forward a copy of the model, in strictest confidence, to PlanWare - Invest-Tech for detailed examination.

PlanWare - Invest-Tech cannot support Cashflow Plan users who acquire future releases of Excel on the grounds that Cashflow Plan cannot be future-proofed to anticipate any incompatibilities or changes introduced by Microsoft into future releases of Excel. However, PlanWare - Invest-Tech intends to upgrade and enhance Cashflow Plan in step with new releases of Excel. These upgrades will be offered to existing users at discounted prices. If users of Cashflow Plan upgrade their copies of Excel, they should retain their earlier release of Excel until either (a) they are completely satisfied that Cashflow Plan runs satisfactorily with the new release of Excel or (b) they have upgraded Cashflow Plan to match the new release of Excel.

For help on hardware and printer problems, users should contact their supplier and specific Excel problems should be addressed to Microsoft.

8.2. Model Development Services

PlanWare - Invest-Tech will give limited general guidance at no charge to users wishing to make structural changes to Cashflow Plan. It also offers a model-building or tailoring service on a fee-paying basis to help users to expand or modify Cashflow Plan to meet particular requirements. This work is undertaken on a confidential basis and to the highest professional standards in accordance with the Code of Professional Conduct of the Institute of Management Consultants in Ireland. The fee arrangements are as follows:

- A written proposal describing the proposed work, fees, etc. will be presented to the prospective client and written acceptance will be requested before any work commences.

- ▪ Fees will be charged at PlanWare - Invest-Tech's standard rates on the basis of the actual time input. Telephone/fax/courier expenses will be recharged at cost. VAT (currently 20%) will be added in the case of Irish-based clients and unregistered clients in other EU countries.

PlanWare - Invest-Tech can also provide one-to-one or in-company training on Cashflow Plan which can be linked to its development and use for a specific modeling application.

8.3. Other Products

Cashflow Plan is one product in a very wide range of spreadsheet-based financial planning software packages developed by PlanWare - Invest-Tech. As similar basic structures, menus etc. are used throughout the range, conversion from one product to another is very straightforward.

These products include **Exl-Plan**, a range of fully-integrated business financial planners covering time horizons from three to seven years and suitable for all types and sizes of businesses. Exl-Plan is especially suitable for preparing business plans and for strategic planning. Section1.6 About Exl-Plan - Business Financial Planner contains further information.

Latest information on products, access to downloadable shareware versions and general advice on many aspects of business planning and development are available at PlanWare - Invest-Tech's website at http://www.planware.org/

PlanWare - Invest-Tech welcomes feedback from users and invites suggestions for improving and extending Cashflow Plan.

8.4. Contacting PlanWare - Invest-Tech

Invest-Tech can be contacted as follows:

Tel: 283 4083

Fax: 278 2391

Dial codes:

IRL: 01-   UK: 00-353-1-   US: 011-353-1-   Other: +353-1-

Email: mailto:info@planware.org

Address: PlanWare, Invest-Tech Limited, 27 Ardmeen Park. Blackrock, Co Dublin, Ireland

Web: http://www.planware.org/

Appendix - 1

License Agreements

NOTICE TO USERS: CAREFULLY READ THE FOLLOWING LEGAL AGREEMENTS. USE OF CASHFLOW PLAN (THE "SOFTWARE") PROVIDED WITH THIS AGREEMENT CONSTITUTES YOUR ACCEPTANCE OF THESE TERMS. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, DO NOT DISTRIBUTE, INSTALL AND/OR USE THIS SOFTWARE. USER'S USE OF THIS SOFTWARE IS CONDITIONED UPON COMPLIANCE BY USER WITH THE TERMS OF THIS AGREEMENT.

> License Agreement for Commercial/Registered Versions
>
> Additional License Terms for Unregistered Shareware ("Trial") & Freeware Versions
>
> Additional License Terms for Distribution of Unregistered Shareware ("Trial") & Freeware
>
> Versions

License Agreement for Commercial/Registered Versions

APPLICATION. This agreement applies to the commercial or registered/upgraded version of the SOFTWARE comprising all workbook & related files and all supporting documentation.

LICENSE GRANT. Invest-Tech Limited grants you a license to use ONE copy of the version of this SOFTWARE on any ONE hardware product for as many licenses as you purchase. "You" means the registered user and refers to the company, entity or individual whose funds are used to pay the license fee. "Use" means storing, loading, installing, executing or displaying the SOFTWARE. "Hardware product" means computer, network node etc. Exceptionally, a registered user is permitted to install and use a single licensed copy of the SOFTWARE on both a desktop PC and notepad PC to which the registered user has exclusive or primary access.

OWNERSHIP. The SOFTWARE is owned and copyrighted by Invest-Tech Limited. Your license confers no title or ownership in the SOFTWARE and should not be construed as a sale of any right in the SOFTWARE. This license is not transferable to any other hardware product or other company, entity or individual.

COPYRIGHT. The SOFTWARE is protected by copyright law. You acknowledge that no title to the intellectual property in the SOFTWARE is transferred to you. You further acknowledge that title and full ownership rights to the SOFTWARE will remain the exclusive property of Invest-Tech Limited and you will not acquire any rights to the SOFTWARE except as expressly set forth in this license. You agree that any copies of the SOFTWARE will contain the same proprietary notices which appear on and in the SOFTWARE.

UNAUTHORIZED USE. You may not modify the SOFTWARE or disable any licensing or control features of the SOFTWARE except as an intended part of the SOFTWARE's programming features. You may not use, copy, rent, lease, sell, modify, decompile, disassemble, otherwise reverse engineer, or transfer the SOFTWARE except as provided in this agreement. Any such unauthorized use shall result in immediate and automatic termination of this license. Most specifically, the SOFTWARE's front worksheet and VBA routines must not be altered under any circumstances. The SOFTWARE can be copied by a registered user for backup purposes and for the purpose of creating additional sets of projections provided that all copies of the SOFTWARE remain on the same hardware product which contains the original supplied files. Multi-user licenses are available from Invest-Tech Limited.

SUPPORT. In return for registering/upgrading a shareware ("trial") version, a user will be entitled to receive a copy of the latest fully operational version of SOFTWARE with, optionally, its printed manual. In addition, a user gains access to support via mail, phone, fax or e-mail for three calendar months following confirmation of registration by Invest-Tech Limited. After this period, the provision of support will be at Invest-Tech Limited's discretion. Registered copies of the freeware version are not supported.

INSPECTION AND TESTING. You agree and acknowledge that you will thoroughly inspect and test the SOFTWARE for all of your purposes upon commencement of your use.

LIMITED WARRANTY. THIS SOFTWARE IS PROVIDED ON AN "AS IS" BASIS. INVEST-TECH LIMITED DISCLAIMS ALL WARRANTIES RELATING TO THIS SOFTWARE, WHETHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NEITHER INVEST-TECH LIMITED NOR ANYONE ELSE WHO HAS BEEN INVOLVED IN THE CREATION, PRODUCTION, OR DELIVERY OF THIS SOFTWARE SHALL BE LIABLE FOR ANY INDIRECT, CONSEQUENTIAL, OR INCIDENTAL DAMAGES ARISING OUT OF THE DELIVERY, PERFORMANCE, USE OR INABILITY TO USE SUCH SOFTWARE, EVEN IF INVEST-TECH LIMITED HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR CLAIMS. THE PERSON USING THE SOFTWARE BEARS ALL RISK AS TO THE QUALITY AND PERFORMANCE OF THE SOFTWARE. IN NO EVENT WILL INVEST-TECH LIMITED'S LIABILITY FOR ANY CLAIM, WHETHER IN CONTRACT, TORT OR ANY OTHER THEORY OF LIABILITY, EXCEED THE LICENSE FEE PAID BY YOU, IF ANY.

SEVERABILITY. In the event of invalidity of any provision of this license, the parties agree that such invalidity shall not affect the validity of the remaining portions of this license.

GOVERNING LAW. This agreement shall be governed by the laws of the Republic of Ireland and any action or proceeding shall be brought only in a COURT located in the Republic of Ireland. This agreement will not be governed by the United Nations Convention on Contracts for the International Sale of Goods, the application of which is expressly excluded.

RESERVED RIGHTS. All rights not expressly granted here are reserved to Invest-Tech Limited.

ENTIRE AGREEMENT. This is the entire agreement between you and Invest-Tech Limited which supersedes any prior agreement or understanding, whether written or oral, relating to the subject matter of this license. Use of the SOFTWARE signifies acceptance of these terms and conditions.

Additional License Terms for Unregistered Shareware ("Trial") & Freeware Versions

SHAREWARE ("TRIAL") AND FREEWARE VERSIONS. These additional terms apply to the unregistered shareware and unregistered freeware versions of the SOFTWARE. These versions of the SOFTWARE are copyrighted shareware and freeware programs and "free" or "public domain" software etc. Users are granted a license to use the shareware and freeware versions only under the terms and conditions specified in this entire agreement.

LIMITED USE. When you first obtain a copy of the unregistered shareware or freeware version of the SOFTWARE, you are granted an evaluation period of not more than 30 days, after which time you must register and pay for the SOFTWARE according to the terms and prices discussed in the SOFTWARE's documentation, or you must remove the SOFTWARE from your computer. The terms of the entire License Agreement for the commercial/registered version apply to upgraded copies of the SOFTWARE.

SUPPORT. Unregistered copies of the SOFTWARE are unsupported.

Additional License Terms for Distribution of Unregistered Shareware ("Trial") & Freeware Versions

SHAREWARE ("TRIAL") AND FREEWARE DISTRIBUTION. These additional terms apply to distribution of the unregistered shareware and freeware versions of the SOFTWARE.

DISTRIBUTION. The following may distribute the unregistered shareware and freeware versions of the SOFTWARE without further permission provided they convey complete and unaltered shareware or freeware versions of the SOFTWARE and provided they make no claim to ownership of the SOFTWARE:

- Private individuals charging no fees.

- Members of Association of Shareware Professionals (ASP) and other similar professional associations.

- Other bona fide shareware and freeware distributors and directories including FTP and WWW sites, BBSs, user groups, CD-ROM publishers, file-distribution networks, syndicators.

BUNDLING. In no case may the SOFTWARE be bundled with hardware or other non-shareware software without prior written permission from Invest-Tech Limited.

VIRUSES. All distribution of the SOFTWARE is further restricted with regard to sources which also distribute virus source code and related virus construction/creation materials. It is unlawful to attach any virus to the SOFTWARE and the SOFTWARE may not be made available on any site, CD-ROM, or with any package which makes available or contains viruses, virus source code, virus construction programs, or virus creation material.

TRANSFERABILITY. Permission to distribute the SOFTWARE is not transferable, assignable, saleable or franchisable. Each entity wishing to distribute the package must independently satisfy the terms of the distribution license.

REVOKATION. Invest-Tech Limited may revoke any distribution permissions granted here, by notifying you in writing. All rights not expressly granted here are reserved to Invest-Tech.

XML FILE. Consult the accompanying XML file in the original distribution files for all distribution requirements. It is hereby incorporated by reference. Any distribution satisfying all the distribution requirements expressed in that file is hereby authorized. Unregistered shareware or freeware versions of the SOFTWARE must not be distributed without the XML file.

Appendix - 2

Lists of Reports & Charts

List of Reports

This listing refers primarily to the more powerful versions of Cashflow Plan.

Assumptions:

1. Sales & Finished Goods Inventory Targets (*Sales & Finished Goods Stock Targets*)
2. Direct Costs
3. Overhead Expenses (*Overheads*)
4. Fixed Assets
5. Funding, Interest Rates & Related Items
6. Receivables, Payables & Phasing of Opening Balances (*Debtors, Creditors & Phasing of Opening Balances*)
7. Input & Output Taxes

Monthly Projections:

Cashflow Projections (with Notes)

Income Statements (*Profit & Loss Accounts*)

Balance Sheets (with opening balance sheet)

Performance Review

Summary

Full-Year Projections:

Cashflow Projections (with Notes)

Income Statements (*Profit & Loss Accounts*)

Balance Sheets (with opening balance sheet)

Performance Review

Summary

Other Reports:

Check Balances Report

Quik-Plan Assumptions Report

Textual Summary Report

Sensitivity Analysis Factors

Key Cashflow Projections

What-If Tables – Working Capital

Short-Term Cashflow Projections

Cashflow Improver

Report for Consolidation

Key Pre- and Post-Roll Forward Projections

List of Charts

Months:

Fig 1. Cashflows for Year

Fig 2. Short-Term Cashflows

Fig 3. Working Capital

Fig 4. Sales Analysis

Fig 5. Sales & Income (*Sales & Profits*)

Fig 6. Cost Analysis

Fig 7. Performance Ratios

Fig 8. Headcount (*Manpower*)

Fig 9. Cashflow vs. Income (*Cashflow vs. Profits*)

Other Charts:

Short-Term Cashflow for Initial Three Months

Key Cashflow Projections

Appendix - 3

Adapting Cashflow Plan to Different Business Types

This appendix offers suggestions for adapting Cashflow Plan to suit manufacturing, distribution, services and hybrid or multi-site business types.

Generally speaking, software and IT businesses can use the first method for distribution businesses as described below. However, if any significant indirect costs (or expenses) can be assigned to sales, strive to use the second method as this will give a much better picture of the distribution of costs, breakeven and gross margins.

For illustrative purposes, the $ currency symbol, 000s denomination and the term inventory (*stock*) have been used throughout this appendix.

As this appendix refers specifically to more powerful versions of Cashflow Plan, certain items will not fully apply to the Free, Micro or Lite versions as these versions do not differentiate between finished goods inventories and materials (or goods for resale) inventories.

Refer to Appendix 5 for detailed guidance on entering assumptions.

Manufacturing

To build up the **Cost of sales** in Assumptions Report No. 2 proceed as follows:

1. Indicate the **Desired finished goods inventory (valued at selling prices)** [4] in Assumptions Report No. 1. If desired, include a provision to cover work-in-progress (WIP).

2. Estimate the opening values of **Desired finished goods inventory**[5] in Assumption Report No. 1. Enter estimates based on the expected sales value (not cost) of the opening **Desired finished goods inventory**. These estimates are used to help calculate **Finished goods required** for the first and subsequent months in Report No. 2.

3. Enter estimates for the **Cost of materials/packaging or goods for resale (as % sales)** and opening and target **Desired inventory of materials/packaging or goods for resale** in Report No. 2.

4. Enter projected **Direct labor**, **Average payroll & benefits cost per direct person**, **Other direct costs** as well as an opening value (at prime cost) of **Total finished goods inventory** in Report No. 2.

From the foregoing data, Cashflow Plan will derive the **Finished goods required**, **Purchases of materials/packaging & goods for resale** and **Cost of sales** in Report No. 2.

As far as practicable, only include variable or semi-variable costs as **Other direct costs** in Report No. 2. Fixed and general overhead costs specifically related to manufacturing can be entered as **Operational expenses** in

---

[4] The indicated inventory levels will be revalued at a later stage in the model to correspond to their prime costs on the basis of the cost of materials and other direct costs indicated in Report No. 2. For example, if a business holds finished goods inventory of $150,000 (valued at selling prices) and if the direct cost of manufacture etc. is calculated to be 45% of sales, the value of the inventory will be reduced in Report No. 2 to $67,500. This is the inventory value that appears in balance sheets.

[5] Enter estimates based on the expected sales value (not cost) of the opening **Desired finished goods inventory**. These estimates are used to project production requirements for the first month.

Report No. 3. This Report also contains a provision to enter **Freight expenses** and **Selling expenses** expressed as percentages of sales.

Distribution

All assumptions relating to **Finished goods inventory** should be set to zero and ignored in Assumptions Report Nos. 1 & 2.

Two alternative approaches to determining **Cost of sales** are explained below.

The first method can be used if the normal convention within the business is to exclude all expense items from **Cost of sales** other than those directly connected with the cost of purchased goods for resale. The approach is as follows:

1. Enter zeros for the opening and projected **Desired finished goods inventory** values in Report No. 1.

2. Enter appropriate values for the **Cost of materials/ packaging or goods for resale** and for the opening and target **Desired inventory of materials/ packaging & goods for resale** in Report No. 2.

3. Enter zeros throughout the rest of Report No. 2.

Use the second method if some specific (and significant) direct costs are usually included in the **Cost of sales**, for example, to cover certain variable processing costs. Proceed as follows:

1. Indicate the **Desired finished goods inventory (valued at selling prices)** [6] in Report No. 1. This step can be skipped if cost differences for finished goods and purchases of goods for resale are not significant, or if finished goods inventories are small relative to inventories of goods for resale.

2. Enter opening values of the **Desired finished goods inventory** in Report No. 1. Enter estimates based on the expected sales value (not cost) of the opening **Desired finished goods inventory**. These estimates are used to project requirements for the first and subsequent months in Report No. 2. This step can be ignored if step 1 above was skipped.

3. Enter estimates for the **Cost of materials/packaging or goods for resale (as % sales)** and the opening and target **Desired inventory of materials/ packaging & goods for resale** in Report No. 2.

4. Enter any projected **Direct labor**, **Average payroll cost**, **Other direct costs** and, if relevant, opening value (at prime cost) of **Target finished goods inventory** in Report No. 2.

From this data, Cashflow Plan will derive the **Finished goods required** (if applicable) and **Purchases of materials/packaging & goods for resale** and **Cost of sales** in Report No. 2.

As far as practicable, only include variable or semi-variable costs as **Other direct costs** in Report No. 2. Fixed and general overhead costs specifically related to operations can be entered as **Operational expenses** in Report No. 3. This Report also contains a provision to enter **Freight expenses** and **Selling expenses** expressed as percentages of sales.

---

[6] The indicated inventory levels will be revalued at a later stage in the model to correspond to their prime costs on the basis of the cost of materials and other direct costs indicated in Report No. 2. For example, if a business holds finished goods inventory of $150,000 (valued at selling prices) and if the direct cost of manufacture etc. is calculated to be 45% of sales, the value of the inventory will be reduced in Report No. 2 to $67,500. This is the inventory value that appears in balance sheets.

Services

The following guidelines also apply to software development and related business types. Where feasible, the second option should be used as it allows costs to be broken down as either direct or overhead. This approach is preferable to treating all expenses as overheads as it can serve to highlight (semi-)variable operating costs and link them more directly to sales. These operating costs could include support, customer service, product maintenance and, possibly, some selling activities.

Option 1:

If the business is strictly labor-only, proceed as follows:

1. Enter zeros for the projected **Desired finished goods inventory** and for the opening values in Report No. 1. See comments below about handling work-in-progress.

2. Enter zeros for the **Cost of materials/packaging or goods for resale (as % sales**) and for the opening & target **Desired inventory of materials/packaging & goods for resale** in Report No. 2.

3. Enter projections for **Direct labor**, **Average payroll & benefits cost per direct person** and **Other direct costs** in Report No. 2 and enter a zero for the opening value of **Total finished goods inventory**.

Option 2:

If the business involves the supply of some products, materials, parts etc., as well as labor, proceed as follows in order to include these costs in the **Cost of sales**:

1. Enter zeros for the projected **Desired finished goods inventory** and for the opening values in Report No. 1.

2. Enter values for the **Cost of materials/packaging or goods for resale (as % sales)** and the opening & target **Desired inventory of materials/packaging & goods for resale** in Report No. 2.

3. Enter details of the **Direct labor**, **Average payroll & benefits cost per direct person** and **Other direct costs** in Report No. 2 and enter zeros for the opening value of the **Finished goods inventory**.

If work-in-progress (WIP) is significant, proceed as follows to set finished goods inventory (i.e. WIP) levels:

Include appropriate values within **Finished goods inventory** in Reports Nos. 1 & 2 and **Cost of materials/packaging or goods for resale (as % sales)** in Report No. 2. Cashflow Plan will automatically calculate the value of purchases of materials etc. needed to accommodate changes in WIP arising from changes in **Sales** and/or **Finished goods inventory targets**.

To accommodate any substantial fluctuations in WIP in a predominantly labor-only business, values for **Direct labor** in Report No. 3 must be manually increased or decreased to take account of any projected changes in WIP and/or sales. For example:

If the sales value of WIP fluctuates significantly from one month to another as specified in the **Desired finished goods inventory** in Report No. 1, **Finished goods required** in Report No. 2 may also fluctuate. When projecting **Direct labor** in Report No. 2, account must be taken of these fluctuations as Cashflow Plan does not automatically adjust **Direct labor** levels in line with requirements. Note that changes in **Direct labor** will not necessarily alter the **Cost of sales** but they may result in altered cash outflows as well as revised inventory values (i.e. WIP) in the balance sheets.

Hybrid & Multi-site Businesses

For businesses involving mixed trades, the simplest approach might be to assign each trade to separate main sales groups and to treat each group as either manufacturing, distribution or services as appropriate. Alternatively, treat each trade as a strategic business unit, develop separate Cashflow Plan models and consolidate the key outputs for each model as explained in Section 7.4.3 Consolidating Projections.

Appendix - 4

How Quik-Plan Handles Assumptions

The following table explains how Quik-Plan allocates its assumptions to Cashflow Plan's Assumption Reports Nos. 1 – 7 for the Micro, Lite, Plus, Super and Ultra versions.

For simplicity, the guidelines use US/Canadian terminology but they are also fully applicable to the Cashflow Plan when it is using the UK/International formats.

Refer to Section 6.4 for guidance on setting up and using Quik-Plan.

<u>Variable</u>	<u>Allocation</u>
Average monthly sales	To **Sales** for the first sales subgroup in Assumption Report No. 1
Desired finished goods inventory	To **Desired finished goods inventory** for first sales group in Report No. 1. ***Not applicable to Free, Micro or Lite.***
Cost of materials/goods	To **Cost of materials/packaging or goods for resale** for the first sales group in Report No. 2
Target inventory of materials or goods for resale	To **Desired inventory of materials/packaging or goods for resale** in Report No. 2
Average monthly direct costs	To first **Other direct costs** category in Report No. 2
Average monthly overheads	To first item under **Administration expenses** in Report No. 3
Revenue grants/subsidies for year	To **Revenue grant/subsidy receipts** in Report No. 5
Opening total cost of fixed assets Accumulated opening depreciation	To opening balance sheet
Average depreciation rate	To **Average depreciation rate** in Report No. 4
Planned capital expenditure for year	To **Capital expenditure** for the 5th month in Report No. 4
Interest rate for cash balances	To **Cash at bank rate** in Report No. 5
Interest rate for all debt/notes	To **Short-term loan/line of credit** and **Longterm debt/loan rates** in Report No. 5
Opening cash balance (deficit) Opening longterm debt/notes	To opening balance sheet
Net change in longterm debt/loans in yr	Assigned to the 5th month for **Increases in longterm debt/notes** in Report No. 5
Opening accounts receivable (*debtors*) Opening accounts payable (*creditors*)	To opening monthly balance sheet. Note that receipts and payments are phased out in the table for **Phasing Out of Opening Balance Sheet Items** in Report No. 6 on basis of 40% during the first month; 30% in the second month; 20% in the third month; and 10% in the fourth month
Average credit given on sales Average credit taken for materials/goods	Converted to percentage distributions for the first sales group in the table for the **Credit Distribution for Payables for Current Year** in Report No. 6

Expected federal/state tax rate	To the **Effective federal/state tax rate for year** in Report No. 5
Planned dividend for year	To **Dividends for current year** in Report No. 5
Proceeds of new stock issues	To **Proceeds of new stock issues** in Report No. 5

Appendix - 5

Guidance on Entering Assumptions

This appendix offers detailed guidance on entering assumptions into Monthly Assumption Reports and opening balance sheet.

For illustrative purposes, the $ currency symbol and 000s denomination have been used and the variable descriptions use US/Canadian terminologies. Where appropriate, the UK/International terminology is shown in parenthesis and italics e.g. (*debtors*).

As this appendix refers specifically to the more powerful versions of Cashflow Plan, certain items will not fully apply to the Free, Micro or Lite versions. For example, these versions do not differentiate between inventories for finished goods and materials or goods for resale. Likewise, users of Free and Micro should ignore references to multiple main sales groups as these version accommodate only one main group.

Cashflow Plan contains many variables and features that may not be required by users. These can be left blank, or with zero values, as Cashflow Plan runs satisfactorily with only minimal assumptions relating to sales, costs, etc., provided it has a balanced opening balance sheet.

The entry of assumptions for all main sales groups within Cashflow Plan is entirely optional. Careful consideration should be given to the most effective use of these groups as they provide the basis not only for sales forecasts but also for calculating cash inflows, direct costs, inventory levels, input/output taxes (sales taxes, GST, VAT etc.), accounts receivable/payable (*debtors/creditors*) etc.

With the exception of values for opening accounts receivable and payable (*debtors and creditors*) entered into the opening balance sheet, all assumption values should be entered net of all input/output taxes (sales taxes, GST, VAT etc.).

Assumptions should be entered only in rows containing ->> or <<->> arrow signs. The <<->> arrows in monthly Assumption Reports indicate that values entered in column B can be used to create delays between expensing items and their related cash outflows. Do this by entering zeros to signify immediate cash payments or integers from 1 and 4 to represent credit periods of between one and four months.

When entering payroll costs always include employees' income tax (payroll taxes/benefits etc.) and related social insurance/security items which are usually payable a month in arrears to the State (or other comparable organizations).

This appendix augments the Glossary of Terms (in Appendix 7) which lists the variables used in the Assumption Reports and provides additional guidance on entering assumptions and explanations of formulae.

Monthly Assumption Report No. 1 - Sales & Finished Goods Inventory Targets

Refer to Appendix 3 - Adapting Cashflow Plan to Different Business Types for guidance on accommodating manufacturing, distribution and service businesses.

For Cashflow Plan Free, Micro and Lite, this report is entitled Monthly Assumption Report No. 1 – Sales Targets.

Seasonal Index

If the business is **not** seasonal, enter 1.00 as a constant factor for each month or simply ignore this row which is used in conjunction with the ***Assumptions | Seasonal Assumptions** menu command.

If the business is seasonal, enter monthly values corresponding to the expected pattern of sales. For example, if sales are closely related to the number of work days per month, enter the appropriate number of days for each month and use the ***Assumptions | Seasonal Assumptions** menu command to allocate estimated annual sales to each month on the basis of this distribution.

Total Sales ($000):

Enter descriptions and monthly projections for the product subgroups. The subgroups within each main sales group must be closely related to each other as only the totals for each main group are used by Cashflow Plan to calculate input/output taxes (sales taxes, GST, VAT etc.), purchases of materials/packaging/ goods, inventory levels, accounts receivable/payable, total direct costs etc.

When entering *Sales*, exclude input/output taxes (sales taxes, GST, VAT etc.) and deduct any discounts allowable.

The identities of the main sales groups can be entered or changed via ***Setup | Assign Names to Sales Groups**. *Not applicable to Free or Micro.*

Of all the assumptions entered into Cashflow Plan, the sales forecasts could have the greatest impact on the reliability of the overall cashflow projections. Consider using Cashflow Plan's sensitivity-analysis facilities to explore *best*, *most likely* and *worst* cases using different sales volume and price levels.

Bad debts as % sales

Enter an appropriate percentage. Sales receipts and input/output taxes (sales taxes, GST, VAT etc.) will be automatically adjusted to take account of the bad debt percentage. The cost of bad debts is treated as an expense in the income statements. *Not applicable to Free, Micro or Lite.*

Desired finished goods inventory ($000):

This variable is primary for businesses engaged in manufacturing and carrying substantial finished goods inventory. *Not applicable to Free, Micro or Lite.*

For each month, enter the desired monthly finished goods inventory levels based on selling price rather than cost. Subsequently, these inventory values will be devalued to their prime cost in Assumptions Report No. 2. See Appendix 3 - Adapting Cashflow Plan to Different Business Types for a more detailed explanation of this process.

Enter opening values for each sales group for *Desired finished goods inventory*. The total for all sales groups (based on sales values) is related to the opening value (at prime cost) of *Finished goods inventory* in Report No. 2. These opening values (in Report No. 1) are used to help calculate *Finished goods required* for the first month in Report No. 2. If precise opening values are not available, make provisional estimates that can be revised at a later stage when their impact on *Finished goods required* becomes more evident.

The interactions arising from the use of finished goods inventory targets can be complex and may produce results that are mathematically correct but confusing, unexpected or undesired. For example, if sales and finished goods inventories are fluctuating significantly then *Finished goods required* (in Report No. 2) could vary over a huge range of values. They could even generate negative values for

Finished goods required or *Purchases of materials/packaging or goods for resale*. If ***Tools | Calculate All & C**heck is used to update the model, an error message will indicate whenever negative values have been detected.

If negative values are encountered, the optimal solution is to systematically fine-tune the *Desired finished goods inventory* one month at a time for each main sales group while monitoring calculated values for *Finished goods required* and *Purchases of materials/packaging or goods for resale*. If these interactions become too complex, a much simpler solution is to set the finished goods inventory targets to zero and include estimated values for finished goods inventory within the projected values for *Desired inventory of materials/packaging or goods for resale* (Report No. 2). This simplification should not cause significant errors for businesses which do not hold substantial finished inventories.

Monthly Assumption Report No. 2 - Direct Costs

Refer to Appendix 3 - Adapting Cashflow Plan to Different Business Types for guidance on accommodating manufacturing, distribution and service businesses.

Try to include only direct or variable or semi-variable costs as distinct from fixed costs in this report. All costs entered into this report will be included in the *Cost of sales*.

Seasonal Index

If the business is **not** seasonal, enter 1.00 as a constant factor for each month or ignore this row which is used in conjunction with the ***Assumptions | Seasonal Assumptions** menu command.

If the business is seasonal, enter monthly values to correspond with the expected pattern of costs. For example, if any direct costs are closely related to the number of work days per month, enter the appropriate number of days for each month and use the ***Assumptions | Seasonal Assumptions** menu command to allocate an estimated annual cost to each month on the basis of this distribution.

Finished goods required ($000):

Derived from *Total sales* and *Desired finished goods inventory* (if applicable) in Report No. 1. See Assumption Report No.1 – Sales & Finished Goods Inventory Targets for guidance on how to resolve negative values. ***Not applicable to Free, Micro or Lite.***

Cost of materials/packaging or goods for resale:

Enter monthly costs for each main sales group as percentage of sales.

Cost of materials/packaging or goods required ($000):

Based on calculated results for *Finished goods required* and *Cost of materials/packaging or goods for resale*.

Desired inventory of materials/packaging or goods for resale ($000):

Enter opening values in the first column and set target monthly levels in the following columns. The opening total for the main sales groups will be automatically incorporated in Cashflow Plan's opening

balance sheet. Consequently, this total should be the same as that which appears in the published or projected opening balance sheet for the business.

Purchases of materials/packaging & goods for resale ($000)

Based on: Finished goods required *plus* closing Materials inventory *minus* opening Materials inventory.

Direct labor (Persons)

Enter projected headcount for direct staff.

If it is not possible to enter estimated numbers for projected *Direct labor*, enter the estimated total monthly payroll cost (as $'s and not as $000's) and then set the *Average payroll cost* to "1" (i.e. 10 persons at $1,000 per month equates to 1 at $10,000 per month.). Note that, if this approach is used, the calculation of the total headcount in the Performance Review Report will <u>not</u> be correct.

For a business holding substantial or fluctuating finished goods inventory, assumptions made for *Direct labor* should be linked to the *Finished goods required* as calculated in this report and should not be based solely on projected *Total sales* in Report No. 1. If the *Desired finished goods inventory* (in Report No. 1) fluctuate significantly from one month to another, *Finished goods required* in Report No. 2 may also fluctuate. When projecting *Direct labor* in Report No. 2, account must be taken of these fluctuations as Cashflow Plan does not automatically adjust *Direct labor* levels in line with requirements. Note that changes in *Direct labor* will not necessarily alter the *Cost of sales* but they may result in altered cash outflows as well as revised inventory values in the balance sheets.

Average payroll & benefits cost per direct person ($000/pers/mth)

Use a weighted average monthly payroll cost (including expenses, allowances, over-time, benefits, subsidies etc.). This should also include employees' income tax (payroll taxes/benefits) and related items, such as social security/insurance, which are payable to the State (or other similar organizations) one month in arrears.

Other direct costs ($000):

Insert values (0, 1, 2, 3 or 4) under the "X" to defer the cash payments related to these costs by up to four months.

The supplied variable descriptions that are unprotected can be altered or ignored. Note that revised descriptions will be automatically changed in the Cashflow Projections.

For a business holding substantial or fluctuating finished goods inventory, assumptions made for *Other direct costs* should be linked to the *Finished goods required* as calculated in this report and they should not be based solely on projected *Total sales* in Report No. 1.

Total cost of matl/pack & goods, direct payroll/benefit and other direct costs ($000)

Derived from the totals for *Cost of materials/packaging or goods for resale*, *Direct payroll/benefit costs* and *Other direct costs*.

Total finished goods inventory ($000)

Enter total opening value at cost. This will be automatically incorporated in Cashflow Plan's opening balance sheet. Accordingly, it should be similar to that appearing in the published or projected opening balance sheet for the business. Note that this opening value (based on cost) is related to the total opening value (based on selling prices) for *Desired finished goods inventory* entered in Report No. 1. ***Not applicable to Free, Micro or Lite.***

Cost of sales ($000)

Based on: Total cost *plus* opening Finished goods inventory *minus* closing Finished goods inventory.

Monthly Assumption Report No. 3 - Overhead Expenses

Insert values (1, 2, 3 or 4) underneath the "X's" in column B within this report to defer the actual cash payments by up to four months. Enter zeros where payments are made within the month.

Any supplied variable descriptions, which are unprotected, can be altered or left empty. Note that changed descriptions will be automatically updated in the Cashflow Projections.

Seasonal Index

If the business is **not** seasonal, enter 1.00 as a constant factor for each month or ignore this row which is used in conjunction with the ***Assumptions | Seasonal Assumptions** menu command. If the business is seasonal, enter monthly values to correspond with the expected pattern of costs.

If, for example, costs are closely related to the number of work days per month, enter the appropriate number of days for each month and use the ***Assumptions | Seasonal Assumptions** menu command to allocate the estimated annual cost to each month on the basis of this distribution.

Operational (indirect) expenses ($000):

Include all fixed and indirect operating expenses, not already included in Report No. 2. ***Not applicable to Free or Micro.***

Selling & freight expenses ($000):

This expense group includes one (or two) sets of variable selling expenses which should be expressed as percentages of monthly sales for the current month.

Use the unlocked variables further down to handle fixed selling and freight expenses. Enter 0,1,2,3 or 4 under the "X" to secure up to four months credit on these costs.

Note: If it is more appropriate to classify freight expenses as direct costs, enter appropriate values in *Other direct costs* within Report No. 2.

Indirect payroll/benefits ($000/pers/mth)

Supervisory payroll/benefits ($000/pers/mth)

Sales staff payroll/benefits ($000/pers/mth)

Clerical payroll/benefits ($000/pers/mth)

Management payroll/benefits ($000/pers/mth)

Staff payroll/benefits ($000/pers/mth)

> If it is not feasible to enter projected staff numbers with their corresponding projected average payroll costs, use "1" as the total staff number. Then, enter a combined **total** payroll cost instead of an average **individual** payroll cost (this works on the basis that 10 staff at $2,000 per month is mathematically equivalent to 1 staff at $20,000 per month). If this approach is used, the calculation of total employment numbers in the Performance Review Report will be incorrect.

> Use weighted average monthly payroll costs (including expenses, allowances, over-time, benefits, subsidies etc.). They should also include employees' income tax (payroll taxes/benefits) and related items, such as social security/insurance, which are payable to the State (or other similar organizations) one month in arrears.

Administration expenses ($000):

Occupancy/general expenses ($000):

> The expense descriptions within these groups can be changed. Enter 0,1,2,3 or 4 below the "X" to take credit of up to four months on these items.

Monthly Assumption Report No. 4 - Fixed Assets

The total value of fixed assets (at original cost or up-to-date valuation) and corresponding accumulated depreciation as at the opening balance sheet date should be entered directly into the opening balance sheet at the *Bal* worksheet (recalculate the model to update the values in this report). These values should correspond to those appearing in the published or projected opening balance sheet for the business.

Average depreciation rate (% pa)

Base depreciation on original cost or use double declining balance

> After entering the expected current-year average annual depreciation rate, indicate whether depreciation should be based on the straight-line method applied to the original cost (enter "0" – i.e. a zero) or the double-declining-balance method for accelerated depreciation (enter "1" – i.e. the digit one).

Capital expend excl leases ($000)

> Enter a value (0, 1, 2, 3 or 4 as appropriate) under the "X" to provide for up to four months of credit on any planned capital expenditure.

New finance lease debt ($000)

Interest paid on new leases ($000)

New lease capital repayments ($000)

> These entries refer to *new* finance and capital leases only. Projections relating to any *existing* leases should be entered via Report No. 5. Note that the capital values of newly leased items are

automatically included in the fixed asset totals within this report and in the monthly balance sheets. *Not applicable to Free or Micro.*

Capital grant/subsidy receipts ($000)

Capital grant/subsidy amortization ($000)

These items refer to Government, local authority and other capital (i.e. non-operating) grants or subsidies which are linked to specific fixed asset purchases and repayable only in exceptional circumstances. These grants are often amortized at the same rate as used to depreciate the underlying fixed assets.

Sale of fixed assets ($000):

Enter details of the proceeds, costs and related accumulated depreciation. Profits/losses derived from the sale of fixed assets are included in the income statements (*profit & loss accounts*). Fixed asset and depreciation balances are automatically reduced to take account of fixed asset sales.

Monthly Assumption Report No. 5 - Funding, Interest Rates & Related Items

Interest rates (% pa):

-Cash at bank

-Short-term loans/line of credit (overdraft)

-Long-term debt/notes

Interest payable on 'other loans' ($000)

The principal difference between *Long-term debt/notes* and *Other loans* is that interest payable on the former is calculated automatically by Cashflow Plan from the interest rate specified for *Long-term debt/notes* whereas interest for the latter is entered directly by the user as an absolute amount at *Interest payable on other loans*. **'Other loans' are not applicable to Free, Micro or Lite.**

When calculating interest on *Short-term loans/line of credit* (*overdraft*), the model applies the specified interest rate to the previous month's closing balance (if any) plus 50% of the current month's pre-interest cashflow (if this negative).

To calculate interest on *Cash at bank*, the model uses the specified interest rate and the previous month's closing cash balance (if any) plus 50% of the current month's pre-interest cashflow (if this is positive). Once interest for the month has been calculated, any positive net cashflow for the month is used to reduce any existing *Short-term loans/line of credit* (*overdraft*) and the balance is then treated as *Cash at bank*. If the net cashflow is negative, it is used to reduce any *Cash at bank* and/or added to any existing *Short-term loans/line of credit* (*overdraft*).

Long-term debt interest is based on the specified *Long-term debt* interest rate and the previous month's closing balance for any *Long-term debt* plus half the net change for the month arising from any repayment or increase in the balance outstanding.

Increases in long-term debt/notes ($000)

Long-term debt/note repayments ($000)

Increases in 'other loans' ($000)

'Other loan' repayments ($000)

> See above for explanation of the differences between *Long-term debt* and *Other loans*.

Interest payment months

> Enter "1" (digit one) to specify the months when interest should be received/paid. If interest is not received/paid within a particular month, it is accumulated within balance sheets until a payment month is reached.

Finance leases from prior years ($000):

> These refer to <u>existing</u> finance or capital leases taken out in previous years. Details of <u>new</u> leases for the current year should be entered into Assumption Report No. 4. ***Not applicable to Free or Micro.***

Total long-term debt/notes ($000)

Total other loans ($000)

Total leases ($000)

Proportions payable within one year:

> To ignore this facility and treat all liabilities for loans etc. as long-term liabilities, enter zeros throughout. Estimate approximate percentages so that liabilities for these loans etc. can be allocated between current and long-term liabilities in the projected balance sheets. When using this facility, account must be taken of any repayments anticipated during the following year as well as any increases in loans likely to arise during the current year.

Miscellaneous income ($000)

> This is credited to the monthly income statement (*profit & loss account*). Consider whether it should be entered gross or net of any taxes.

% Net income attributable to minority interests ($000)

> If applicable, make monthly forecasts of the percentage of projected net income (net profit) attributable to minorities. The appropriate calculated values for minority interests will be included in the monthly Income Statements (Profit & Loss Accounts) and Balance Sheets.

Revenue grant/subsidy receipts ($000)

> These refer to receipts of non-repayable operational, employment or training grants and related subsidies.

Operating lease payments ($000)

These should exclude payments relating to finance and capital leases, which should be entered elsewhere in Report Nos. 4 and 5.

Amort. intangibles & investment write downs ($000)

Enter the amounts by which intangibles should be amortized and investments written down. Use a negative number to increase the value of intangibles or investments where no cashflows are involved – if cash payments are made, use **Purchases of intntangibles & new investments** below.

Purchases of intangibles & new investments ($000)

Enter the values. Cashflow Plan will assume that these purchases are funded by projected cash resources (or overdraft/ short-term credit). If desired, loans or share issues (or a combination) can be used instead.

Changes (+/-) in accrued expense ($000)

Changes (+/-) in prepaid expenses ($000)

These two rows enable adjustments to be made to the projected cashflows and balance sheets to take account of prepaid and accrued expenses. It is not essential to use this feature unless it is desired to make specific adjustments in order to improve the accuracy of the cashflow projections or to accommodate substantial cash movements, which cannot be handled elsewhere.

Adjustments (+/-) to receivable levels ($000)

Adjustments (+/-) to payable levels ($000)

Use these rows to adjust the monthly debtor/creditor (receivable/payable) levels which are automatically calculated using credit assumptions in the second table in the **RecPay** worksheet. The adjustments will automatically modify relevant cash flows in worksheet **Cash** and the balances in worksheet **Bal_**. Use this facility to make seasonal, temporary or exceptional adjustments to the credit levels calculated using the credit assumptions in **RecPay**. In most cases, increases in levels (using positive values) should be reversed after some months by entering reductions (using negative values) to revert to the (more normal) calculated levels.

Approximate percent of total payroll costs relating to taxes & benefits for all staff (%)

These percentages refer to income taxes and related social insurance/security items usually paid by the employer to the State within a month of net wages/salaries being paid to employees.

Enter approximate percentages. These are likely to be in the range 30-50% and can be derived from recent income and payroll tax returns. In the Cashflow Projections, income taxes and related social insurance/security items are automatically paid one month in arrears of salaries and wages. For example, if the total payroll for a particular month is $20,000 and the overall percentage for income taxes and social insurance/security is estimated at 30%, then $14,000 will be paid as net salaries to staff during that month and $6,000 (representing income taxes withheld from employee wages/salaries and related social insurance/security items) will be paid to the State during the following month.

Proceeds of new stock issues ($000)

Enter values net of expenses and commissions.

Effective federal/state tax rates for year (%)

Ignore this item if the business is a sole trader or partnership. Enter effective combined tax rate after taking account of allowances, loss carry forwards etc. Tax liabilities arising in previous years but payable during the current year are handled in Assumption Report No. 6 within the table for Phasing Out of Opening Balance Sheet Items.

Federal/state tax payments ($000)

Ignore this item if the business is a sole trader or partnership. Enter values for tax payments to be made during the coming twelve months in respect of income/profits associated with any year-end falling within the coming twelve months. This situation can arise where the coming twelve months embrace a tax year-end. For example, the twelve months might relate to the period October-September and include December which, for instance, could be the last month of a tax year. This could result in a tax payment having to made during the coming twelve months in respect of the tax-year ending December.

Note that tax liabilities arising in previous years but payable during the current year are handled in Assumption Report No. 6 within the table for Phasing Out of Opening Balance Sheet Items.

Dividends for current year ($000)

Enter a value (0, 1, 2, 3 or 4) in the cell under the "X" to defer the payment of dividends declared in the current year by up to four months. Dividends declared in previous years, but payable during the current year, are handled in Assumption Report No. 6 within the table for Phasing Out of Opening Balance Sheet Items.

If the business is a sole trader or partnership this item changes automatically to *Drawings ($000)* and the following two rows facilitate the entry of income tax liabilities and payments.

Income tax provisions ($000)

Income tax payments ($000)

Enter estimated amounts. These items do not apply when Cashflow Plan has been set up for a corporation.

Monthly Assumption Report No. 6 - Receivables, Payables & Phasing of Opening Balances

In the UK/International edition, this report is titled "Debtors, Creditors & Phasing of Opening Balances"

The report contains two tables for (a) phasing out specific opening balance sheet items and (b) handling current-year accounts payable and receivable respectively. Avoid creating calculation ERRORS when completing these tables.

Phasing out of opening balance sheet items

The total amount to be phased out for each item is indicated in the left-hand column of the table. This is the value (if any) previously entered into Cashflow Plan's opening balance sheet. (If no values have yet been entered in the opening balance sheet, the totals in this table will be zero until values have been entered into the opening balance sheet and Cashflow Plan recalculates).

The total amount to be phased out during the twelve months for each item must be the identical to the total shown in column F. This total should have been entered already into the opening balance sheet. Otherwise, a calculation error will arise. This error will be reported when Cashflow Plan next recalculates and the item causing the error will be identified by *ERR* appearing in lieu of an ->> arrow in column B.

Always enter positive values except in the case of Taxes due where negative numbers can be entered to reflect tax refunds (assuming that a negative value has been entered for Taxes in the opening balance sheet).

Credit distributions for payables & receivables (*debtors and payables*) for current year

Use the six columns in this table to enter the percentage distributions of credit expected to apply during the current year to the projected sales and purchases of materials/packaging & goods for each of the main sales groups. The total for each row must always equal 100%. Otherwise an *ERROR* will be displayed in the right-hand column and reported when Cashflow Plan next recalculates.

The following table shows how this method of allocating credit works in practice for two groups of debtors:

| Debtors: | Months Credit Given/Taken (% Total): | | | | | | |
	Under 1	1-2	2-3	3-4	4-5	5+	Total %
Group 1	80	20					100
Group 2	20	20	20	20	20		100

In this example, eighty percent of the Group 1 debtors are expected to pay cash or settle within one month (effectively to pay cash) and the remaining twenty percent are expected to pay during the second month. The average credit taken works out at 21 days. In the case of Group 2, one-fifth of debtors are expected to pay within one month, a further fifth are projected to pay within one to two months and so on. Their average credit is about 75 days.

Monthly Assumption Report No. 7 - Input & Output Taxes

This report focuses on input and output taxes, for example, sales taxes in the US, Goods & Services Tax (GST) in Canada and Australia, and Value Added Tax (VAT) within the EU. Its facilities are flexible enough to accommodate most types of input and/or output taxes for most tax regimes.

A short description, or an abbreviation, to serve as a title for input/output taxes should be entered via ***Setup | Enter Basic Model Info**.

US-based businesses may wish to ignore this report in its entirely (i.e. set all assumption cells to zero or leave them empty).

Average output tax rates on sales (%):

When entering the output tax (sales taxes, GST, VAT etc.) rates, different rates can be used for each main sales group. If necessary, composite or weighted average rates can be used for each group to take account of mixed rates, exports etc. The rates used need not correspond to official rates.

Calculate input/output taxes on an invoice or cash-received basis?

Enter "0" (zero) to indicate invoice basis or "1" (digit one) for cash-received basis.

Mark months when input/output tax paid to State

If the business pays these taxes etc. every month, enter a " 1" (digit one) for each month. If a two-month cycle applies, enter a " 1" (digit one) every second month. Enter a "1" every third month for a three-month cycle. All other months should contain zeros.

Average input tax rate for purchases of materials/packaging & goods (%)

Percent of all other non-payroll expenses (operating exs etc) subject to input taxes (%)

Average input tax rate for non-payroll expenses (%)

Percent of capital expenditure, intangible asset purchases, new investments, lease repayments and interest subject to input taxes (%)

Average input tax rate for these items (%)

Estimate approximate percentages and rates. Use weighted average rates to take account of expense categories using mixed rates. The entered tax rates need not coincide with official published rates.

Opening Balance Sheet

To complete the entry of assumptions for the twelve months, all outstanding values must be entered into the opening balance sheet. This is accessed via the ***Output | Balance Sheets** menu command. Once these values have been entered, recalculate (using ***Tools | Calculate All & Check** to confirm that the opening balance sheet balances and that there are no calculation errors in the model.

If there is an imbalance, *CHECK balance sheet balances* at the very bottom will indicate the magnitude and direction of the imbalance.

Note that the opening value of inventory in the opening balance sheet is derived from the values for total inventories within column F of Monthly Assumption Report No. 2.

The table for *Phasing out of opening balance sheet items* in Monthly Assumptions Report No. 6 should be used to phase the payments of certain items that appear in the opening balance sheet. If the total being phased out for an item differs from that entered into the opening balance sheet, Cashflow Plan will report an error when it next recalculates using the ***Tools | Calculate All & Check** menu command. If this happens, return to Report No. 6 and revise the value in the row showing ERR instead of an ->> arrow in column B.

Appendix - 6

Calculation Error Messages

Cashflow Plan was extensively tested during its development to ensure that it is robust and does not contain or cause any errors. It was tested with zero values throughout to eliminate divide by zero errors; with large values for every assumption to test for possible imbalances between the sub-models; and with values entered and calculated on a progressive basis to detect errors caused by the interaction between variables.

Cashflow Plan's calculations and formulae were checked manually and the entire model was extensively checked using an auditing system. In some circumstances, values may not appear to add up correctly due to rounding off or when Cashflow Plan's sensitivity-analysis facility is being used.

PlanWare - Invest-Tech cannot guarantee that all possible errors or sources of error have been removed and cannot anticipate errors that may be introduced by users. Accordingly, users should always review the detailed output reports for possible anomalies and calculation errors.

Cashflow Plan incorporates separate worksheets containing income statements (*profit & loss accounts*), balance sheets and Textual Summary Reports to handle its US/Canadian and UK/International format options. The three specific US/Canadian worksheets contain critical formulae for detailed calculations relating to sales, costs, balances etc. whereas the three special UK/International worksheets contain formulae which, in most instances, simply refer back to cells in the US/Canadian worksheets. These formats are specified via ***Setup | Enter Basic Model Info** and, in effect, result in Cashflow Plan hiding the unused worksheets. These can be unhidden by unprotecting the active worksheet (***Protection | Unprotect This Worksheet**) and then selecting **Format | Sheet | Unhide**.

Cashflow Plan's calculation error detectors will automatically switch focus between the two sets of worksheets in accordance with the format specified by a user. Accordingly, when seeking the source of an error, a user should in the first instance search for it within the worksheets being used for their specified format. If the error cannot be found, the search should be extended to the three hidden worksheets using the alternate format. These can be unhidden by unprotecting the active worksheet (***Protection | Unprotect This Worksheet**) and then selecting **Format | Sheet | Unhide**.

The following messages will be displayed immediately after Cashflow Plan recalculates using the ***Tools | Calculate All & Check** menu command (or "C" button) if a calculation error is detected. Errors will only be reported if outside pre-set tolerance limits as Cashflow Plan automatically filters out and ignores trivial errors due to rounding off and calculation differences etc. arising after the third decimal place.

In addition, when Cashflow Plan detects a calculation error, it opens a help window describing the error and explaining how it can be resolved. This facility can be turned on and off using ***Setup | Toggle Help for Calculation Errors**.

All percentage distributions of credit are not equal to 100%!

Go to Monthly Assumption Report No. 6 and locate the row containing an ERROR message in the right-hand column of the table for the **Credit Distributions for Payables & Receivables** (*debtors and creditors*) for current year. This message signifies that the percentage distribution of credit for the row does not equal 100%. Change the percentages used.

Error in the phasing out of opening balance sheet items!

Locate the error within the table for **Phasing Out of Opening Balance Sheet Items** in Monthly Assumption Report No. 6. Go to the row indicating *ERR* instead of an ->> arrow in column B. This signifies that the total amount being phased out for an item (row) over the twelve months differs from its opening value in the opening balance sheet. Check and change appropriate entries.

Negative Finished Goods Required have been encountered!

Negative values have been detected for *Finished goods required* (Report No. 2). These could produce unexpected, and undesired, results in the Cashflow Projections etc. In real life, negative values are not possible, so review the monthly targets for *Desired finished goods inventory* in Assumption Report No. 1. See Monthly Assumption Report No. 1 – Sales & Finished Goods Inventory Targets for further guidance.

Negative Purchases of Materials/Packaging have been encountered!

Negative values have been detected for *Purchases of materials/packaging or goods for resale* (Report No. 2). These could produce unexpected, and undesired, results in the Cashflow Projections etc. In real life, negative values are not possible, so review the monthly targets for *Desired inventory of materials/packaging or goods for resale* (Report No. 2). See also Monthly Assumption Report No. 1 – Sales & Finished Goods Inventory Targets for further guidance.

One or more monthly balance sheets are unbalanced!

Refer to *Check balance sheet balances* at the bottom of monthly Balance Sheets to determine the magnitude and direction of the balance sheet error. Determine whether the value of the error increases each month or remains constant. This can provide a clue to its source. Try to locate the source by progressively removing assumption values and recalculating using the ***Tools | Calculate All & Check** menu command or "C" button. If the error's source cannot be located or easily fixed, the best option is often to revert to an error-free, backup copy of the model.

Opening monthly balance sheet is unbalanced!

Go to the first column of the monthly Balance Sheets and refer to *Check balance sheet balances* at the bottom of the opening balance sheet to determine the magnitude and direction of the opening balance sheet error. Particularly examine the opening values for inventory derived from assumption values entered in column F of Assumption Report No. 2. To identify the item causing an imbalance, it may be necessary to increase the number of decimal places being displayed for items in the opening balance sheet.

Some formulae are generating errors!

This may be due to the use of Cut & Paste to move assumption values whose cells are referenced in formulae. If possible use Undo to remove the change. Also, review reports for #DIV/0! and #REF!. If the problem cannot be eliminated, reload an earlier version of the same model and confirm that it is error-free. Instead of using Cut & Paste, **always use** Copy & Paste and then delete the copied item.

The two sub-models are not producing identical results!

Go to the *Check Balances Report* and from the *Differences* column of this report identify the sub-model and element causing the difference. If the error cannot be easily located, endeavor to restore the model to its state

immediately before the error was detected and then progressively reinsert values in batches while recalculating frequently to track down the source of the error. Failing this, reload an earlier version of the same model and confirm that it is error-free.

Appendix - 7

Glossary of Terms

The terms in this glossary refer to variables in the Assumption Reports. The definitions provide additional guidance on entering assumptions and explanations of formulae. They supplement Appendix 5 - Guidance on Entering Monthly Assumptions.

For illustrative purposes, the $ currency symbol and 000s denomination have been used.

Accumulated depreciation

Enter **Accumulated depreciation** as at the planned opening balance sheet date in the opening balance sheet at the *Bal* worksheet.

Approximate percent of total payroll costs relating to taxes & benefits for all staff

Enter estimates which include employees' income taxes and related taxes/benefits. Typically, the percentages could be in the range of 30% to 40%. These percentages will be automatically deducted from total monthly payroll costs by Cashflow Plan and will be paid to the State one month in arrears. For example, if the total payroll for a particular month is $20,000 and the overall percentage for income taxes and social insurance/security is estimated at 30%, then $14,000 will be paid as net salaries to staff during that month and $6,000 (representing income taxes withheld from employee wages/salaries and related social insurance/security items) will be paid to the State during the following month.

Average depreciation rate

Enter an average annual depreciation rate covering all assets that will apply throughout the year in the *FixedAss* worksheet.

Average input tax rate for non-payroll expenses

The tax refers to GST, VAT etc. which apply in Canada, Australia, EU etc. It do not operate in the US and consequently can be ignored by US-based businesses. When estimating an average rate, exclude all payroll expenses.

Average output tax rates for sales

This tax refers to sales taxes, GST, VAT etc. Estimate weighted average rates to take account of mixed rates, exports etc. These rates need not correspond to official rates.

Average payroll & benefits cost

This cost should comprise gross wages (plus expenses, allowances, over-time, benefits, subsidies etc.) and all payments made by employer to cover employees' social taxes as well as any other add-on payroll charges or benefits.

Calculate input/output taxes on an invoice or cash-received basis

This facility allows businesses to calculate their input/output tax liabilities (sales taxes, GST, VAT etc.) on a cash-received basis rather than the more usual invoice-basis. Regulations relating to this facility vary from one country to another.

Capital expenditure

Indicate planned **Capital expenditure** commitments in the *FixedAss* worksheet and specify the number of month's credit to be secured (enter 0,1,2,3 or 4 below the "X").

Changes (+/-) in accrued expenses

Use + for an increase and - for decrease. The projected cashflows and balance sheets are automatically adjusted to take account of these changes.

Changes (+/-) in prepaid expenses

Use + for an increase and - for decrease. The projected cashflows and balance sheets are automatically adjusted to take account of these changes.

Clerical payroll/benefits

These should comprise gross wages and salaries (plus expenses, allowances, over-time, benefits, subsidies etc.) and all payments made by employer to cover employees' social taxes as well as any other add-on payroll charges or benefits.

Cost of materials/packaging or goods for resale

Enter costs as percent sales for the appropriate main sales groups.

Cost or valuation

Enter the total original cost (not the written-down value) as at the opening balance sheet date within the *Bal* worksheet at the assumptions cell for Fixed assets.

Credit distribution for creditors & debtors for current year

Indicate the percentage distribution of credit for each item. ERROR in column L for a specific row indicates that the percentage distribution of credit for that row does not equal 100% exactly. This item only applies when Cashflow Plan is using UK/International terminology.

Credit distribution for payables & receivables for current year

Indicate the percentage distribution of credit for each item. ERROR in column L for a specific row indicates that the percentage distribution of credit for that row does not equal 100% exactly. This item only applies when Cashflow Plan is using US/Canadian terminology.

Desired finished goods inventory

Enter estimates for the opening and projected inventory levels to help Cashflow Plan determine the total **Finished goods required** (Report No. 2) to meet projected sales and inventory-building. These inventory levels should be valued on the basis of selling prices rather than cost. Set all values to zero if business is distribution or labor-only services. This item only applies when Cashflow Plan is using US/Canadian terminology.

Desired finished goods stocks

Enter estimates for the opening and projected stock levels to help Cashflow Plan determine the total **Finished goods required** (Report No. 2) to meet projected sales and stock-building. These stock levels should be valued on the basis of selling prices rather than cost. Set all values to zero if business is distribution or labor-only services. This item only applies when Cashflow Plan is using UK/International terminology.

Desired inventory of materials/packaging or goods for resale

Enter opening values and make projections for subsequent months. The total opening amount for the main sales groups is included in the opening balance sheet. This item only applies when Cashflow Plan is using US/Canadian terminology.

Desired stocks of materials/packaging or goods for resale

Enter opening values and make projections for subsequent months. The total opening amount for the main sales groups is included in the opening balance sheet. This item only applies when Cashflow Plan is using UK/International terminology.

Direct labor

If all direct costs, other than materials/packaging or goods for resale, should be excluded from **Cost of sales**, then set direct labor values to zero.

Disposals of fixed assets

Give details of any planned fixed asset disposals.

The **Proceeds** refer to the consideration to be received. The **Cost** refers to the original cost (or latest valuation) of the fixed assets being disposed of. The **Accumulated depreciation** covers the total depreciation of the assets being disposed of right up to the disposal date.

Dividends for the current year

Use the cell below the "X" to defer payment of dividends by up to 4 months by entering 0, 1,2,3, or 4. This item does not apply when Cashflow Plan has been set up for businesses operating as sole traders or partnerships.

Effective corporation tax rate for year

Effective federal/state tax rates for years

Enter estimated rates after taking account of any losses forward etc. This item does not apply when Cashflow Plan has been set up for businesses operating as sole traders or partnerships.

Finished goods inventory

Enter the opening inventory value as at the opening balance sheet date. This total value is incorporated in Cashflow Plan's opening balance sheet. The value must be consistent with any estimates for opening **Desired finished goods inventory**, based on selling prices, previously entered in Report No. 1.

Finished goods required

These values are calculated from **Sales** + closing **Finished goods inventory** - opening **Finished goods inventory**.

If there is an unexpected dramatic change in projected requirements for the first month, review the estimated values of opening **Desired finished goods inventory** in Report No. 1.

Indirect payroll/benefits

These should comprise gross wages (plus expenses, allowances, over-time, benefits, subsidies etc.) and all payments made by employer to cover employees' social taxes as well as any other add-on payroll charges or benefits.

Interest on new leases

These refer to the 'interest' component of payments to leasers.

Interest payable on 'other loans'

Enter estimated values. These payments may need to be adjusted to take account of any increases or decreases in outstanding balances for **Other loans**.

The difference between **Other loans** and **Longterm debt/notes** is that the actual amount of interest payable is specified for the former whereas for the latter it is calculated automatically based on closing monthly balances and the specified interest rates.

Interest rates

Enter annual, not monthly, rates.

Leases from prior years

Interest refer to the 'interest' component of projected payments to leasers in respect of leases taken out in previous years. Interest for projected new leases should be entered in Report No. 4.

Repayments refer to the 'capital' component of projected payments to leasers in respect of leases taken out in previous years. Repayments for projected new leases should be entered in Report No. 4.

Longterm debt/notes

Enter annual rate of interest. The interest amount for **Longterm debt/notes** is derived from the projected interest rates. It is calculated automatically based on closing monthly balances and the specified interest rates.

The difference between **Other loans** and **Longterm debt/notes** is that the actual amount of interest payable is specified for the former and for the latter it is calculated automatically based on closing monthly balances and the specified interest rates.

Management payroll/benefits

These cost should comprise gross salaries (plus expenses, allowances, over-time, benefits, subsidies etc.) and all payments made by employer to cover employees' social taxes as well as any other add-on payroll charges or benefits.

Mark months when input/output taxes paid to State

These taxes refer to sales taxes, GST, VAT etc. Enter zeros ("0") for all months that are not tax payment months.

New leases

Assets acquired through finance (or capital) leasing are treated as fixed asset purchases and corresponding liabilities are automatically created to reflect these purchases.

Operational overhead expenses

Use the cells below the "X" to enter the number of months (0 to 4) of credit being obtained on the corresponding cost items. Only enter integers (0, 1, 2, 3 or 4). The unlocked descriptions can be changed or ignored.

Other direct costs

As far as practicable, enter only variable or semi-variable costs that can be attributed to production or operations here. Fixed costs are treated as overhead expenses and entered into Report No. 3. Use the cells below the "X" to enter the number of months (0 to 4) of credit being obtained on these cost items. Enter only integers (0, 1, 2, 3 or 4).

If all direct costs (aside from the cost of materials/packaging or goods for resale) are conventionally excluded from **Cost of sales**, set all values for **Other direct costs** to zero and enter the overhead expenses in Report No. 3.

Overdraft

These short-term borrowings arise when negative cashflows drive **Cash at bank** into the 'red'. Interest, based on the rate specified in Report No.5, is charged on the resulting monthly balances. The steady and sustained build up of an overdraft signifies the need for a longer term cash injection. This item only applies when Cashflow Plan is using UK/International terminology.

Percent of all other non-payroll expenses (operating exs etc) subject to input taxes

These taxes refer to GST, VAT etc. which apply in Canada, Australia, EU etc. They do not operate in the US and can be ignored by US-based businesses. When estimating an average rate, exclude all payroll expenses.

Phasing out of opening balance sheet items

If ERROR appears in column B for a specific row in this table within Assumptions Report No. 6, then the total amount being phased out during the year for the row differs from the total shown in column F (entered via the opening balance sheet).

Proportions payable within one year

Use this table to apportion **Longterm debt/notes**, **Other loans** and **Leases** between Current and Longterm Liabilities within the projected monthly balance sheets. Enter approximate percentages that take account of repayments or increases expected during the current and subsequent year. If this feature is not required, set all the percentages to zero.

Repayments on new leases

These refer to the 'capital' component of payments to leasers.

Sales

The unlocked descriptions for the sales sub-groups can be changed.

To change descriptions for the main sales groups, use ***Setup | Assign Names to Sales Groups**.

Sales payroll/benefits

These should comprise gross wages and salaries (plus expenses, allowances, over-time, benefits, subsidies etc.) and all payments made by employer to cover employees' social taxes as well as any other add-on payroll charges or benefits.

Seasonal Index

Values in this row can be used to allocate a total value over rows assigned to assumption values within the corresponding report. Enter appropriate values (e.g. work days per month) within the seasonal index and then use ***Assumptions | Seasonal Assumptions** to pro-rata a total value across the assumption rows. Note: Cursor must be located within a boxed in and unlocked block.

Selling & freight expenses

Use the cells below the "X" to enter the number of months (0 to 4) of credit being obtained on the corresponding cost items. Only enter integers (0, 1, 2, 3 or 4). The unlocked descriptions can be changed or ignored.

Short-term loans/line of credit

These loans arise when negative cashflows drive Cash at bank into the 'red'. Interest, based on the rate specified in Report No.5, is charged on the resulting monthly balances. The steady and sustained build up of

short-tem loans signifies the need for a longer term cash injection. This item only applies when Cashflow Plan is using US/Canadian terminology.

Staff payroll/benefits

These should comprise gross wages and salaries (plus expenses, allowances, over-time, benefits, subsidies etc.) and all payments made by employer to cover employees' social taxes as well as any other add-on payroll charges or benefits.

Supervision payroll/benefits

These should comprise gross wages and salaries (plus expenses, allowances, over-time, benefits, subsidies etc.) and all payments made by employer to cover employees' social taxes as well as any other add-on payroll charges or benefits.