**Business Analyst –**

**The Profit Improvement Tool**

The Business Analyst tool, especially the One Page Taster and One Page Cashflow very quickly highlight the impact of potential changes in the business.

Business Analyst

"Software to help you coach your clients to increase profitability."

The aim of Business Analyst is to guide your clients, step by step, through the “numbers” and show the effect of the well known “three ways to grow your business” and the effect this will have on their profitability.

The “three ways” are: -

1. Increase the number of customers – this is both gaining new customers and keeping existing customers.

1. Getting the customers to buy more often.
2. Increasing the value of each sale – either by increased prices or getting the customers to buy more each time.

When profits are lower than anticipated, a first step is often to cut back on expenses, for example, the advertising budget, or maybe even change to a "cheaper" accountant! But if you can "add value", and assist the client, and charge the client for doing so, the clients will view your fees as money well spent. Compliance does not add value but helping to increase profitability does!

As with any projection, you cannot give any guarantees that the target will be achieved, but you are showing the clients the right ways as well as making them “think" about the business and how it functions in a practical way, through its “key drivers”.

It is recommended that you read through these notes and then make the tutorial entries that appear in the printouts in the appendix to these notes in order to fully understand the system. Note that the model is not suitable for every type of business e.g. farmers, and it is not intended to take away the "thinking" - you must review the entries to ensure that they are reasonable, realistic and achievable, and the clients, after discussion, must think so too!

**Points to note**

To move around the screens, you can either use the "tab" key to move forward to the next data entry box or "shift tab" to move to the previous data entry box. Alternatively, you can left click with the mouse pointer in the appropriate data entry box.

Boxes like this indicate “tips”. Simply hover the mouse pointer over the red triangle and some help text will pop up which relates to the box being completed.

Red shaded boxes are generally “warnings”, and green shaded boxes are used to indicate that targets have been reached. The target profit box on the What If? page will be red whilst below “target” profit and green once above “target” profit.

Some boxes are “protected”, and you cannot enter data into these. They are automatically completed.

“Spinners” are used to increase or decrease the figures by variable amounts when flexing assumptions / targets.

The whole spreadsheet is password protected to prevent accidental changes. Note that it is a “template”, and a new spreadsheet is created each time you use it as long as you do File New and not File Open.

## Printing

Once you get to the last page, you can print your report. If you want single pages you can click on the print icon on each page.

The Tools tab has four print area buttons, one next to each section, which enables the print area to be set for the particular report you wish to print out.

**Disclaimer**

Whilst every effort has been taken to ensure the model in line with the defined parameters, neither BBS Computing Ltd nor 2020 Innovation Training Ltd can accept any responsibility for any actions or inaction taken as a result of using the model.

Should you find any “bugs”, please feed them back to us. We will do our utmost to rectify them within a reasonable period and will either talk you through the amendments or issue a revised version.

The use of the software is not transferable to other practices.

The spreadsheet and this help document have been virus-checked before issue but neither BBS Computing Ltd nor 2020 Innovation Training Limited will be responsible for any computer virus that may be introduced into the purchaser’s equipment.

# WORKING WITH BUSINESS ANALYST

It is recommended that you enter the ACTUAL figures from the latest accounts first, before making any adjustments. Complete all the pages, without flexing any of the figures or making +/- adjustments. All spinners are pre-set to 0. You may even decide to do a “before” and “after” printout for your clients.

**Step 1 – Where are you now?**

Enter the client name; this will appear on all reports in the same format that you enter it.

Enter the date of the last accounts in the format dd/mm/yy. This will be converted to the "long" form of the date and used in reports.

Choose the entity type from the pop down list. This determines whether certain fields are displayed e.g. drawings etc. These now only appear if it is a sole trader or partnership.

Identify the key “driver” for this particular client business – do they sell time i.e. labour or machine hours or is it “bed nights” (a hotel); covers (a restaurant); or some other driver. A nursing home could be bed weeks, consultations for a dentist etc. In other words, what are the “units” sold? For retail trades where the key performance indicator is gross profit margin, enter sales as the driver. Later on, you will examine number of customers, average spend etc.

For those key drivers where weeks are involved e.g. a restaurant open 40 weeks of the year, please also click in the box to indicate the number of days per week they are open. They may only open for 6 days per week, so highlight 6. This is relevant in computing the number of bed nights or potential covers etc.



Note that you have a choice of 1-5 for hours, bed nights etc. If you choose option 5 –sales, you are taken to an “alternative” method as the “main” model is not suitable for cash-based businesses such as retail shops etc. If you want to use the main model, select type 4-other.

Extract information from the latest accounts and enter them into the appropriate screen boxes. Note that direct labour to be included in "cost of sales" and direct materials included in "cost of sales" need to be entered separately. Indirect labour will be entered in phase 2. Depreciation is shown separately, as this does not affect cash flow and it is also not going to vary by inflation adjustments.

A facility exists to enter drawings and taxation. These are optional, and tax does not have to be shown separately. As stated above, these fields only appear if the type sole trader or partnership is selected.

Watch for WARNINGS at the foot of the pages. These are additional help tips for your use in discussion with a client. The warning message on this page relates to drawings and taxation exceeding profits generated.

**One Page Taster**

Having entered the basic information from the last accounts you can immediately do a simplified What if? scenario. Click on the One Page Taster button. There are spinners where you can modify the percentage changes to various figures. There is also space to insert some explanatory text of your own.

**One Page Cashflow**

The one-page cashflow shows both the profit and cashflow effect of changes to the variables. For instance, if prices increase and an additional £100,000 sales is generated, this will not produce £100,000 in cash as some of it will be tied up in debtors. Some additional data entry is required on this page for stocks, debtors and trade creditors.

Some of the changes e.g. a reduction in debtor days will increase cash availability but will have no effect on profit.

**Key Performance Indicators**

The KPI page highlights five KPIs generated from the one-page summaries – gross and net profit %, stock, debtor and creditor days.

**Full Analyst Model**

If you choose the full model, then the remaining steps are as follows – having completed the first page of data: -

# Step 2 – Office and other non-direct expenses

The starting point is overhead expenses, including any indirect wages from the latest accounts. You have the option to enter up to four types of expense that are forecast to increase next year and four types that are likely to decrease or are non-recurring in the current year**.** You do not need to adjust these for inflation, as this is done via a spinner. The default is 0.00% but no figures will appear until you adjust the spinners. This is intentional - all zeros are suppressed from the display.

The inflation percentage is automatically carried forward to the “what if” page (see later) and applied to materials cost.

## Mark-up

There are miscellaneous figures required by the model. The mark-up on goods sold is entered here. Note it is the **mark-up** applied and **not** the gross profit. Enter the number only i.e. 30 and not 30%. Note that an entry is **only** required if you are using hours as a key driver, and where you sell materials that you apply a mark-up to. Examples would be builders, etc. Where you are doing a restaurant or hotel, you do not generally focus on the mark up on the cost of food etc, you are looking at the “spend”. If you wished to do this however, then you could use the mark-up box.

The major item we need to enter is the **Target Profit** the client is hoping to achieve in the next period. This will require some thought. As a guide, the target drawings and target tax payments can also be entered. These are really memo figures to help focus the mind on a “profit” requirement. Ignoring timing differences of accruals and prepayments, stocks etc. if drawings and tax exceed profits, this will obviously lead to a net cash outflow and this cannot be sustained for any great period of time.

Note the model does not aim to do cash flow forecasts.

# Step 3 – Direct (productive) wages

The Name/Category enables you to enter individuals or classes of employee. Enter the salary for last year and use the spinner to set an “across the board” pay increase.

**a) – Calculation of Salaries**

You can adjust the employer’s NI rate and the lower limit. NI is calculated automatically based on the figures in the boxes. If the accounts span the dates of a rate change you can enter the “average” e.g. 9 months @ 12.20 % and 3 months @ 10% would be an average of 11.65%. The same can be done for the lower rate. This is likely to be a sufficient approximation of the NI. Note that in doing actuals and projections you may need to amend the rates for each model if there are significant NI changes.

The Employers NI is calculated automatically, and the number of months employed column is necessary to enable this to work correctly. The default entry is 12, but if someone only works 6 months of the year enter 6.

Pension contributions haver been added to the model and you can choose the % of the employer’s contribution and whether the contributions are based on the full salary or just the bare minimum for auto-enrolment pensions by ticking the box alongside the contribution %. As an example, if there is an employee on £60,000, pension on the full salary is calculated as 3% of £60,000 - £1800. If the box is unticked, the pension contribution is based on the earnings between £6136 and £50,000.

The “£ +/- Adj Salary column” allows you to further adjust salaries by figures than percentages. You can enter + or – figures as required. It is recommended that you enter the proprietor(s) in this section too, as the names are automatically carried to the Productive hours section below the wages section. However, they will clearly not have any “salary cost” as such (if it is a sole trader/partnership) so the salary entries should be left blank.

The “number in category” column is set to 1 as default but enables you to enter any number of employees in a category if you do not wish to list them separately. Assuming 6 people paid £12000 p.a. each you enter £12,000 and put 6 in the number field.

There are two areas for data entry. The top section should be used for existing staff in the year for which we have entered the accounts figures as our base. The section underneath the "Employee changes in projected year" should be used to reflect the joiners or leavers in the year for which we are trying to project. *Leavers should be entered as negative figures.*

This differentiation is necessary to deal with the potential hours available in each year. Note that this has certain assumptions attributed to it and is discussed later on in the appendix.

b) Calculation of potential chargeable hours, potential income and average charge rate

In this section the names and the number in category are automatically entered from the previous section. Enter the weeks worked and the hours per week (or the beds available and the number of weeks open etc. as appropriate) and the multiple will then be calculated. The hours per week should be the **maximum expected** hours that you anticipate **could** be achieved. If you expect to see 35 hours per week on a time sheet as “chargeable” this would be the figure used, rather than say the 32 or the 38 hours that they **actually** work.

 Note that the second data column will automatically copy the entry above it as soon as an entry is made in the first data column. You can override the contents of this cell, and you can restore the formulae at any time by clicking on the restore formulae button.

The “average charge rate” is calculated automatically and this figure is used later on in the model.

# Step 4 – Summary of where the business is now

This is a report only page and does not require any data entry. To move around use the arrow/page up-down keys or the mouse. This pulls together the basic information and

the figures from the previous tabs and does some calculations and percentages. It calculates for instance the “average” hours sold and compares it with the potential hours. A warning will appear if Actual hours are greater than Potential hours and the box will be shaded red. This page should be reviewed to ensure the figures look “sensible” before moving on.

In some instances, the turnover in the last accounts may have been affected by factors that make it inappropriate to use this as a starting point for the “what if” scenarios. This could be for instance a sale or purchase of a business during the year or a business that was open all year round becoming a “seasonal” business. Turnover can now be “flexed” to give a different starting point (and this has a knock-on effect to the direct costs which vary in proportion). If turnover is increased, using the spinners, the direct costs increase in line with the mark up on materials percentage determined earlier. The direct wages will be adjusted in the appropriate section (using “leavers”), as will the direct expenses (one adjustment figure in the +/- box).

The figures from this page appear again later where they are compared to forecasts.

**Step 5 – Maximising your profit**

**General**

This is the key screen in the model, and it is here that you will vary the figures, and, ultimately, some of your clients’ behaviour, to arrive at the target profit. The target profit will be entered automatically from the earlier tab where it was set, and in the top part of the screen is the Projected Profit. This will change as you adjust the spinners. Initially it is likely to be shaded red but will turn green when the figure exceeds the Target Profit.

Note the screen is split so that these two figures will be on the screen at all times.

There are two click boxes which give you control over how quickly the spinners increment. You have the choice of 2 decimal places or 1. So you can go up as follows:

0.01, 0.02, 0.03, 0.04, 0.05 etc

OR

0.1, 0.2, 0.3, 0.4. etc.

Note that by switching from one to another the figure will be a factor of 10 different from previously. You cannot therefore go up in 1/10 first and then switch to 1/100 as 10% in 1/10 units will be 1% in 1/100 units.

There are “spinners” on the screen which enable you to perform “what-if” calculations for each step. The figures in the list boxes are a quick way of entering a whole number % figure to use for your flexing. You can click in the boxes and highlight any number between 1 and 10 which will be the starting point for the "what if" % increases. This avoids having to spin through the whole range of numbers to get to the required starting point, unless you want to do it this way. Again, the choice is yours.

The click to reset button removes the “spinner” adjustments, just leaving the list box entries. That is, if you had set it to 5% and then used the spinners to adjust it to 15%, the reset to default % button would set it back to the 5% again-the number in the list box.

As you make changes, the effect of those changes can clearly be seen on the worksheet. Whilst the screen at first sight may appear overwhelming, you will soon be able to explain to a client the logic and how the figures change so that he can understand them.

See the appendix - Assumptions used etc, for caveats and help in interpreting the figures.

## Flexing the figures

### Effect of staff adjustments

This section is used where employees are taken on during a period. The model assumes that the recovery % will be the same as that achieved by the existing staff-e.g. 75% recovery. However, it is possible that this will not be the case e.g. a “foreman” might be engaged and his productivity (hours charged) may be considerably less e.g. 50% only. This section enables this recovery % to be flexed.

### Adjust charge rate

This section allows flexing of the “average” charge rate. Note that it does not determine a charge rate to be applied – only an average. As far as the client is concerned, he should monitor his invoices to see the charge rates being applied. Those showing a low average rate would need to be investigated.

### Adjust Productive units

The effect of this spinner varies depending upon the key driver. If it is hours and there are materials used, it assumes that additional sales will be the number of extra hours at the average rate + materials used and the profit mark-up.

e.g. 100 extra hours @ £30 average, 100% mark-up on materials and the direct cost per unit of materials is £22.50. Additional revenue is therefore 100\*(£22.50+£22.50 mark-up) = £4500 + 100\*£30=£3000 labour = £7500. The additional profit is £7500 sales less £2250 direct costs = £5250. (Note direct costs are 30% of the sales).

However, if a driver other than hours is chosen, the model works differently. If for example bed nights is chosen, using the figures above purely for illustration – the revenue would be £30\*100 = £3000 and the direct costs are 30% of the sales, in this case £900, so the additional profit generated would be £2100.

### Flex Materials Mark-up

This adjusts the % mark up applied to the materials where this is applicable.

*Adjust Cost of Materials*

This section allows inflation or other adjustments to the materials cost to be applied and assumes that the appropriate mark-up can be applied to these additional costs. There will be a figure already in this section if you have entered an inflation adjustment to the

expenses. It assumes that the inflation rates will be the same – however you can vary it using the spinners and you do not have to leave it “as is”.

# Step 6 –Potential Profit - Where do you want to be?

This page summarises the original position (the same figures that appeared on the report in step4), but then inserts the projected figures for the year under review and does a comparison in figures and % terms. This is the “end result” and definitely a sheet for the client.

**Making even more profit – what if** **scenarios**

If you use sales (type 5) you are taken straight to this page. This is used where the “what if” pages may not be appropriate, or it can be used with it as an alternative way of looking at the business and providing leverage to sales activity.

Whichever way you use it, you still need to analyse the business by completing the accounts, expenses and wages tabs as data is retrieved from these pages into this section.

The weekly and monthly figures are available but note the “average spend” is the same in each case, being the average spend per transaction.

Flex the figures and shows the effects of an increased number of customers, or the effect of an increase in frequency of visit or average spend.

Note in some cases the frequency may be 1 and you set the number of customers accordingly. Do not therefore flex the frequency in these cases.

**Tools**

There are various “tools” to help illustrate various further points – the effect of discounting or premium pricing, the effect of increased prices and reduced activity as a result, and a gross profit/ mark-up calculator. In addition, there is a detailed example of the price changes and a trade discount calculator.

The price discounting policy shows the effect of deciding to cut prices and what turnover would be required to maintain profit levels, whilst the premium pricing policy shows the effect of price increases and the turnover that you could afford to lose whilst maintaining profit margins.

The “what if” scenario shows the overall effect of increasing prices and losing business as a result.

The gross profit/mark-up calculator can be used in three ways –

a) input sales and cost and get the mark-up and the gross profit,

b) input the gross profit % and get the mark up %

c) input the mark-up % and get the gross profit %

All three are separate so three different examples could be done on one sheet.

**Appendix 1**

**Assumptions used in the model and interpreting the figures and how to use the reports**

There are various assumptions that have to be used in any modelling scenario.

On the pre adjustments summary page, if the "Actual as a % of potential" is greater than 100%, then you will need to look at the figures again. It is obviously not possible to achieve more than the potential number of hours, without additional recruitment.

Direct wages are treated as a "fixed" cost, on the basis that they will be incurred in any event. You may need to review the labour costs and see if one or more persons need to be taken on.

On the "What if" pages, it is assumed that the direct materials cost per unit is spread equally over the number of units and will vary directly in line with any increase or decrease in units.

If there are staff adjustments e.g. a new member of staff, it is assumed that they will utilise direct materials in the same proportion as existing staff. This cannot be flexed in this version. It also assumes that the hours utilised will be in the same ratio as the existing calculation. This can however be flexed, using the spinner in the staff adjustments section, in units of 10 hours.

Is the business relatively constant from year to year? For example, a computer business may sell a lot of hardware one year, but then very little in the next year, and generate its fees from consultancy, which will have little or no materials cost.

## Interpreting the figures

Here is where the consultancy skills of the accountant come into play. You need to be able to “sow seeds” as to how the business can then be improved. Some brief examples are:

Ways to increase the number of customers/average spend-

Specials by tills

Key product positioning – e.g. sweets in supermarkets

Restaurant –merchandise counter?

 -additional sweet to take home?

Marketing “gimmicks”

Hotels – 3rd night accommodation free.

Etc.

Detailed marketing ideas are not within the remit of this product.

**Using the reports**

* There are several ways that you can use the model and the reports. The model can be done whilst you are sitting with the client. You may prefer not to do this, as it can be changed very easily and quickly and may make it harder to justify your consultancy fees for added value services if it can be seen to be too easy! However, it is also a very powerful tool, and may get the client’s interest, and lead to extra consultancy fees. So, both methods are likely to be applied in practice.
* The reports could be printed out as a discussion document, and final versions bound up and sent to the client as additional to the accounts. Printing to a colour printer also enhances the product.
* Having identified the key drivers, suggest that the client then tries to record **actual** numbers.
* For those businesses with more than one profit centre, you will need to produce a model for each one. For example, a hotel will require a) bed nights, b) restaurant and possibly c) bar.
* There will be some businesses where the key drivers/units will need to be user defined. An example would be estate agents – number of property sales. This will need to be “Other” in the model.

**Appendix 2**

**Commonly asked questions**

**Interest/Finance charges are not shown separately, so they increase by the inflation adjustment. Why?**

If there is increased business activity, then it is that charges will increase, and additional bank facilities may be required. There are ways around it - you can put a reduction in the overheads to compensate for the inflationary increase, or you can decide to include finance charges in with the depreciation figure.

**In the what-if scenario, it assumes that additional staff will incur direct costs. Can I change this?**

In this version, no. But to compensate, you can put an adjustment through the overheads.