

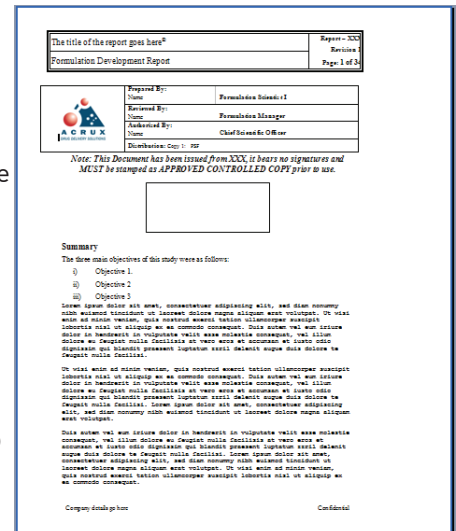
Case Study

Acrux improves the quality of their customer-facing scientific reports whilst slashing the editing effort required.

The challenge

With a large team of scientists on staff, many scientific reports are written at Acrux. This dynamic Australian drug delivery company is in the business of developing and commercialising a range of patient-preferred pharmaceutical products. Their product development and formulation reports are critical components of the folios presented to potential customers and regulatory bodies. These reports have to convince the reader that the products work as stated, with sound scientific evidence to support therapeutic claims.

Whilst Acrux's scientists are great at science, they recognised that their report writing skills needed polishing. Their managers agreed, wanting to reduce the amount of editing needed by them. "Senior staff were investing considerable time in editing the reports instead of checking only their scientific integrity" commented Kerry Setiawan, Formation Manager at Acrux.



The solution

Acrux approached the pharmaceutical consultancy PharmOut for help. The solution implemented by PharmOut consisted of several components:

- New MS Word templates that both improved the readability of the documents and automated many of the common tasks the writers had to perform
- Training on how to use the templates as well as advanced Word functions and good writing tips
- A Quick Reference wall guide that detailed how to use the MS Word templates and provided style guidelines for common document elements
- Recorded screen videos, with voice over, that demonstrated how to use some of the advanced Word functions discussed in the training sessions

The new templates were designed to constrain line length in a report to 9-12 words. This is the optimal length that the human eye can track, without wandering off. Wide margins and an 11 pt font size were used to achieve this. The inter-line space was also wider than normal. Again, this helps the eye identify lines of text and read across them easily.

The templates included MS Word functions that automated common tasks such as: cross referencing; automatically adding captions to tables and pictures; and applying styles to different parts of a document. The document protection function in MS Word was incorporated in the templates. This stops spurious styles being added to a report when text is pasted in from another document.

During the training, the scientists were taught how to use techniques such as reading a document aloud to improve their writing. They were introduced to the Flesch readability scale and taught how to use an online tool to measure the readability of their writing. Given the technical subject matter and the high education level of a likely reader, a Flesch score of 30 or higher was the aim.

The Quick Reference wall guide listed instructions for common operations. It also included some style guidelines for scientific writing as well as short cuts for often used symbols (e.g. press Alt 0181 to insert μ).

Screen videos of the MS Word functions demonstrated during the training were supplied as part of the solution. This allows authors to access the information on-demand, instead of having to remember the steps from the training. The aim was to make it feel like a colleague was showing them how to do it.

“We were very pleased with the solution provided by PharmOut. We anticipate a huge improvement in the quality of the reports and an equally large reduction in the editing effort involved in getting them customer-ready.”

Adam Watkinson
Chief Scientific Officer
Acrux

An A3-sized Quick Reference guide lists writing tips and guidelines for using the new report templates.

Acrux Report Templates Quick Reference

The Acrux report templates are protected. This prevents spurious styles being added to documents when text is pasted in. To stop document protection, Tools menu > unprotect document. Password = acrx

1 Introduction
This is body text. It is justified Verdana 11 pt. The margins and space between the lines have been selected for optimal readability.

2 Objectives

3 Experimental
The results are shown in Table 1.

3.1 Materials

- Bullet 1
- Bullet 2

3.2 Equipment

1. Numbered list
2. Numbered list

4 Results & Discussion

Table 1. Caption is automatically inserted

Header row	Header row	Header row
1	Data	Data
2	Data	Data

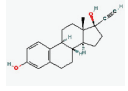


Figure 1. Caption for figure

To setup the Header & Footers
Double click on Header area. Type in the Title, Report#, Revision # and Date.
Click Next or Previous buttons on the header and Footer toolbar.

To set the Section 2 odd & even pages header and footer

To insert a cross-reference:
Word menu > Insert > Reference > cross-reference.
Select Reference type. Set 'Insert Reference to': **Only label and number**

To insert reference to another document:
Word menu > Insert > Reference > footnote.
Select 'endnote'. Set number format to 1, 2, 3...

Style = Bullets 1st level

Style = Numbered list

Insert a table using the Word toolbar
Apply 'Tables for data' style.
Data won't fit? Select Table. Apply 'table text - small' style.
Table too wide? Right-click > Autofit > Autofit to window
Cut & paste? Insert > Paste special > Formatted text (RTF)

Click at insertion point.
Word menu > Insert > Picture > From file.
Caption is added automatically. If it isn't, use Word menu > Insert > Reference > Caption
To fit across columns, right-click picture > Format picture > Size [tab] > Width=14 cm

To insert	Click	Tip:
µ	Alt 0181	To display non-printing marks on the screen, use Word menu > Tools > Options. On the View tab, click the All checkbox under 'Formatting marks'.
°	Alt Ctrl I	
°C	Alt 248 then C	

Common writing mistakes

- Not thinking about the audience and what you want them to think or do
- Calling something different names in different parts of the document - be consistent
- Using long sentences - read text aloud and listen for pauses and being out of breath. Use the online Flesch reading ease score tool - aim for score of low 30s
- Not spelling out an acronym in full the first time e.g. Food Manufacturing Practice (FMP)
- Assuming the audience understands internal names and jargon - remove them or explain them
- Spelling and grammar errors - use the tools in Word

Style guidelines

Capitals
Capitalize the first letter of the names of persons, places, days, months, titles of books and periodicals, nationalities and institutions, for example:
Melbourne, Tuesday, September, Basic Gas Chromatography books total, Australian, State Electricity Commission
Capitalize specific or proper names only, not common names, such as laboratory.
Use lower case when spelling out chemical elements and chemical compounds, for example: manganese, aluminium hydroxide

Captions
Captions for figures & tables require a full stop immediately after the figure number. Don't place a full stop at the end of the caption, e.g. Figure 29. Pharmacokinetic Parameters for NSA and EE.
Latin terms not commonly used are italicised: *in situ*, *in vitro*, *in vivo*. Commonly used ones are not, e.g. *h*, *kg*, *et al*. There is always a space between the quantity and the unit of measurement unless they form a unit modifier, use a hyphen in this case.
50 mL in a flask

a 50-ml flask not 50ml.
Don't put a space between the number and a percent symbol: 25% not 25 %
When using the ° symbol to indicate temperature, place a space after the number, but keep the ° and capital C together: 25 °C not 25° C
When using the ° symbol to indicate an angular measurement, place the ° symbol against the number: 12° not 12 °
Always place a nought before the decimal point: 0.0006 not .0006
When reporting a quantity to an agreed number of significant figures, report all similar quantities to the same significance throughout the publication, e.g. reporting of characteristic concentrations.
When two series of numbers come together, use words for one number and figures for the other:
Take three 5 mL aliquots of...
SI units are the same whether singular or plural and do not have a full stop after them, e.g. mL not mL., and 2 mg not 2 mgs.

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Version 01

The benefits

Relief was the look on many of the faces as the trainees left the training sessions. A post-training survey confirmed that they felt the tools and techniques learnt would reduce the time it took to generate reports and improve their writing.

Acrux managers were pleased with the outcome. “These reports are a critical part of our business,” said Adam Watkinson, Chief Scientific Officer. “We were very pleased with the solution provided by PharmOut. We anticipate a huge improvement in the quality of the reports and an equally large reduction in the editing effort involved in getting them customer-ready.”



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