

# Sage Business Intelligence

Leveraging Technology to Automate the Consolidation of Companies in a Multi-Company Accounting Environment

Shifting your focus from 'working in the data' to 'working with the information'

## Context

Most small and medium sized businesses find themselves allocating too many resources to gathering and structuring financial data with the noble aim of having it presented to and analyzed by management. In addition to the detailed costs of the traditional approach to this as detailed in this paper, arguably the largest toll paid by the organization using manual consolidation processes, is that key staff concentrate their focus not on using the information for driving change but on generating the Consolidated Reports.

The correct application of technology to automate the creation of these reports will liberate key staff to shift their focus away from 'working in the data' to a focus of 'working with the information'. 'Working in the data' translates into a business expense and 'working with the information' translates into positive business evolution.

The case made in this paper is that the actual cost of building these reports is much higher than estimated by management and that leveraging technology to automate this process has now become a very affordable option.

## The overlooked costs of manually consolidating companies for reporting

### Time

This is an easy cost to measure: Hourly cost of Controller (say \$30 per hour), multiplied by three days, results in a monthly cost of \$720 per month. Three days is the average number of days that a team would take to gather, structure and quality assure the data in a consolidation environment before presenting it to management. When metering this cost it is important not to overlook the fact that multiple people are often involved in the production of the reports.

## Lost opportunity for innovation and staff development

When thinking about the alternative to spending three days on generating the consolidated financials, it is not hard to imagine those team members analyzing the consolidated financials and using the liberated time to identify internal and external opportunities to increase revenue and/or reduce costs, identify exceptions in the financial reports, suggest new and meaningful KPIs to include in the financial reporting, identify errors and suggest improvements to processes.

### Barriers to real-time information

In a manual consolidation environment, reports are only generated when they are due because of the toll placed on the team to produce them. This is a barrier to real-time reporting and a restriction on the availability of decision-making information for management.

### Barriers to post production adjustments

Very often, the first output of the report set is not the final output as there may be adjustments required for the current period or prior periods or even forecast figures, which are identified after the production and perusal of reports. In these cases a manual solution to consolidated reporting produces an aversion to making these adjustments post production as they are laborious to include in the final report set.

### Poor audit trails

The nature of a consolidated report set done manually is that the spreadsheets used to produce them often evolve a little each month and with each successive owner of the spreadsheet. This piecemeal evolution often results in a set of spreadsheets with convoluted formulae and an audit trail that would frighten the most confident spreadsheet users. Even when you can follow the audit trail back to the original transaction, the time cost in retrieving that information only becomes feasible for figures considered material.

### What Does Key Performance Indicators - KPI Mean?

According to [www.investopedia.com](http://www.investopedia.com), KPI refers to a set of quantifiable measures that a company or industry uses to gauge or compare performance in terms of meeting their strategic and operational goals. KPIs vary between companies and industries, depending on their priorities or performance criteria. Also referred to as "key success indicators (KSI)".



## Automating the consolidation of multiple companies

The benefits of automating the consolidation of multiple companies is the elimination of all the business costs of not automating, as listed above.

There are two basic approaches taken by companies in the quest for an automated solution to consolidate their reporting:

1. Implementing a solution that manages all intercompany transactions within the accounting software. This can be done by using software that automates the posting of eliminating entries in response to any intercompany transactions or by creating a phantom company that holds all eliminating entries or by dedicating certain GL accounts to host the eliminating entries.
2. Creating a store of current and historical eliminating entries within the reporting tool, so that eliminations are managed at the reporting level.

This paper is not partial to any one of the solutions above but only explores the second solution – consolidating at the reporting level. The solution documented below has been implemented using Sage's Business Intelligence technology branded as 'Sage Intelligence'. 'Sage Intelligence' is a powerful, MS Excel based reporting tool that is integrated with most of the Accounting software platforms owned and sold by Sage.

## A suggested solution to automating consolidated financial reporting using Sage Business Intelligence

Firstly, there may be as many formats for financial reporting as there are companies using Sage software, so the format of these reports are not the primary focus here. The primary focus is the flow of the data and the reporting features that are made available to the end user, with the end result of eliminating all the business costs listed in this paper and producing a Return on Investment (ROI) for the company that selects to automate the consolidation of companies.

### Suggested Data Flow

Across all integrated Sage Business Intelligence platforms, Sage Intelligence exposes the accounting user to a standard Financial Report which serves as a starting point to the automation of financial reporting. This standard Financial Report also has the option to access the data from multiple companies and by using this feature, the adventure of automating consolidated Financial Reporting begins.

In this example, three companies will be consolidated which have intercompany transactions. Two of the companies transact solely in Canadian dollars (CAD) and one of the companies transacts solely in US dollars.

To effectively automate this consolidation, the following data is required:

- The multi-company data produced by the standard Financial Report available in Sage Intelligence
- Updated foreign exchange data for CAD/USD
- Intercompany eliminating entries for the current month, historical months and for budgets (if budgets are reported on)

### Financial Reporting Features available using Sage Intelligence Products

- Multi-company reporting
- Reporting from disparate databases
- Dynamic Financial Dashboard reporting
- Drill-down to GL Account and GL transactions
- The option to store foreign exchange data and eliminating entries in Sage Intelligence
- Rapidly switching between individual company and consolidated reporting
- Easy distribution of Consolidated reporting to other users of MS Excel
- Portability of the report and associated reporting features
- Exposure of the full power of MS Excel to Financial Reporting
- Multiple views of Financial data – Actual, Budget, Prior, Variance, etc.

## Graphical Representation of Typical Solution

In Fig. 1, the diagram shows how financial data flows from the Sage Intelligence standard financial report and from the 'Eliminating Entries' and 'Exchange Rate between USD and CAD' for company 'USD Company' to produce two dynamic reports:

- 1) A Side by Side Company Report including the eliminating entries and the USD Company converted to CAD and
- 2) An Income Statement with the option to view individual companies and the consolidation of all companies.

FIG. 1

## Automated Consolidation Data Flow

Sage Intelligence



## Eliminating Entries

	January 2012	February 2012	March 2012	April 2012	May 2012	June 2012	July 2012	August 2012	September 2012	October 2012	November 2012	December 2012	Total
Gain/(Loss) on Assets	89.00		228.00										317.00
Foreign Exchange Gain/Loss	115.00		252.00										453.00
Consulting Income								62.00	179.00				241.00
Rental Income													0.00
Interest & Other Income													0.00
Dividend Income													0.00
Investment Management Fees													0.00
<b>Expenses:</b>													0.00
Accounting								249.00	220.00				469.00
Bad Debts													0.00
Consulting													777.00
Donations													626.00
El and CPP					205.00		190.00	116.00	168.00				679.00
Employee benefits					37.00		151.00	211.00	131.00				530.00
Entertainment													129.00
GST													185.00
Insurance													246.00
Legal													199.00
Management services													165.00
Memberships & Subscriptions													150.00
Miscellaneous Expenses													145.00
Office lease													123.00
Postage & courier													0.00
Property Taxes													0.00
Repairs & Maintenance													0.00
Salaries													0.00
Stationery & supplies					224.00		150.00						374.00
Telephone & fax					292.00		161.00						453.00
Travel					67.00		286.00						353.00
<b>Total Expenses</b>					156.00		55.00						206.00
Interest Expense					288.00		217.00						515.00
Income Taxes - Current					129.00		115.00						244.00
								163.00	516.00				679.00

## Foreign Currency Exchange Rate

	January 2012	February 2012	March 2012	April 2012	May 2012
CAD	0.04	0.33	0.07	0.75	0.55
USD	0.99	0.08	0.81	0.99	0.31



## Individual and Consolidated Reporting

	CURRENT MONTH			YEAR-TO-DATE		
	ACTUAL	BUDGET	PIOR	ACTUAL	BUDGET	PIOR
ABC Company	1,485	1,541	2,238	3,403	1,765	960
XYZ Company	3,724	2,292	3,228	1,469	477	1,952
USD Company						
Foreign Exchange Gain/Loss						
Consulting Income	3,628	211	707	2,154	1,825	3,298
Rental Income	3,197	1,071	2,754	2,689	1,543	3,718
Interest & Other Income	2,924	2,690	1,438	529	747	2,250
Dividend Income	1,725	3,289	3,547	2,767	2,932	2,842
Investment Management Fees						
<b>Total</b>	<b>16,683</b>	<b>11,694</b>	<b>13,668</b>	<b>13,041</b>	<b>9,399</b>	<b>15,000</b>
<b>Expenses:</b>						
Accounting	2,429	2,615	2,868	1,053	3,528	3,385
Bad Debts	2,754	3,133	1,373	863	314	1,191
Consulting	820	2,410	2,468	2,159	2,652	3,162
Donations	3,247	1,013	3,479	2,954	1,757	1,328
El and CPP	2,466	854	328	3,962	2,939	3,129
Employee benefits	2,853	1,404	2,272	3,957	3,336	2,440
Entertainment	460	2,278	2,572	1,087	3,154	3,686
GST	1,094	1,813	765	2,178	2,520	625
Insurance	1,123	3,052	239	2,649	1,683	2,242
Legal	3,155	2,893	1,996	2,726	2,514	1,348
Management services	2,724	345	1,661	3,085	3,166	1,558
Memberships & Subscriptions	1,428	531	1,530	2,068	3,925	2,801
Miscellaneous Expenses	3,727	3,783	298	422	246	2,286
Office lease	1,113	1,612	1,658	1,308	3,767	2,235
Postage & courier	416	1,638	561	2,825	886	3,554
Property Taxes	385	1,438	1,452	3,336	3,709	1,519
Repairs & Maintenance	1,558	1,653	3,617	2,188	978	1,529
Salaries	1,508	2,921	2,617	3,228	2,522	2,064
Stationery & supplies	3,653	2,614	2,676	2,512	2,952	3,168
Telephone & fax	1,328	3,129	2,611	1,596	2,394	312
Travel	2,713	868	2,582	2,965	1,279	3,779
<b>Total Expenses</b>	<b>42,692</b>	<b>42,844</b>	<b>42,626</b>	<b>51,971</b>	<b>52,309</b>	<b>51,667</b>

## Side by Side Company Reporting

	Actual			Consolidation Adjustments	Consolidated Position
	ABC Company	XYZ Company	USD Company in CAD		
Gain/(Loss) on Assets	6,825	527	482	109	551
Foreign Exchange Gain/Loss	617	840	1,431	14	1,444
Consulting Income	3,950	1,817	3,310	82	3,392
Rental Income	3,691	3,716	6,759	67	6,944
Interest & Other Income	4,265	5,857	4,111	94	4,295
Dividend Income	3,646	1,264	3,738	20	3,756
Investment Management Fees	3,343	2,004	5,674	86	5,760
<b>Total</b>	<b>26,287</b>	<b>16,521</b>	<b>26,565</b>	<b>492</b>	<b>25,991</b>
<b>Expenses:</b>					
Accounting	2,876	1,396	558	65	621
Bad Debts	6,888	1,695	3,066	45	3,111
Consulting	6,267	2,316	5,909	60	5,966
Donations	4,994	1,034	4,312	(1)	4,302
El and CPP	1,828	6,119	226	79	295
Employee benefits	2,320	6,350	4,830	88	4,918
Entertainment	1,601	2,469	1,656	83	1,696
GST	1,686	3,991	4,616	44	4,666
Insurance	4,051	5,148	2,010	53	2,085
Legal	6,543	4,227	967	65	1,022
Management services	4,195	989	1,845	106	1,951
Memberships & Subscriptions	2,764	6,769	1,588	95	1,682
Miscellaneous Expenses	412	5,694	986	40	1,026
Office lease	6,234	2,176	4,340	120	4,460
Postage & courier	2,975	738	4,013	28	4,041
Property Taxes	5,082	6,576	6,696	85	6,771
Repairs & Maintenance	6,800	1,796	5,845	112	5,957
Salaries	4,596	1,041	1,747	117	1,864
Stationery & supplies	4,443	6,074	4,563	112	4,675
Telephone & fax	4,118	6,527	1,865	119	1,984
Travel	4,811	3,338	1,287	24	1,291
<b>Total Expenses</b>	<b>85,664</b>	<b>78,911</b>	<b>64,629</b>	<b>1,514</b>	<b>66,343</b>
Interest Expense	4,472	4,188	3,593	65	3,658
Depreciation	4,341	2,991	5,799	26	6,021
Income Taxes - Current	5,587	5,648	3,730	60	3,796
<b>Total</b>	<b>14,330</b>	<b>12,823</b>	<b>13,118</b>	<b>151</b>	<b>13,269</b>

Fig. 2 illustrates some of the commonly used applications of Sage Business Intelligence in a solution that consolidates multiple companies. From this image it can be noted that the horizontal and vertical dimensions are customized to meet the unique reporting needs of the customer. This custom definition is the most common application of Sage Business Intelligence and is often the first step in building such a solution.

The top left of this image illustrates how easy it is to select between multiple companies and a consolidated option for rapidly switching between individual companies and to the consolidation of companies. In this example, when the 'USD Company' is selected, it is displayed in CAD currency, as it is automatically converted, based on the data flow in the diagram titled 'Automated Financial Consolidation – Data Flow'. Midway down the left of this image, a display of the multiple views of the consolidated reporting as defined by the customer shows how Sage Intelligence can rapidly switch between different views on the same screen.

The drill-down example in Fig. 2 shows the first level of a two level drill-down that is invoked when double-clicking on the salaries figure of \$1,438.

## Summary

In dealing with the question of cost versus benefit as it relates to the automation of consolidated financial reporting, it is important to account for all the costs of not automating and to consider the business benefits listed above of using the appropriate software for automation.

The Business Intelligence software sold by Sage provides the technology required to automate the consolidation of multiple companies and to manage the complexities normally found in this process, like inter-company eliminations, foreign currency exchange rates and the customization of reports so that they may be presented to meet unique customer requirements.

The end result is that the team that implements an automated solution to consolidated financial reporting can expect a rapid return on investment (ROI) and an evolution from 'working in the data' to 'working with the information'.



## ABOUT THE AUTHOR:

Craig Juta is a Sage Intelligence Expert known for his ability to build solutions which require 'thinking outside of the box'.

For almost seven years, Craig's career has been focused on delivering paradigm shifting Business Intelligence solutions to the SME space. Craig is also the founder of the Intelligence Store which satisfies the business manager's need for rapid and affordable access to business reporting.

[www.TheIntelligenceStore.com](http://www.TheIntelligenceStore.com)

**FIG. 2** Commonly used applications of Sage Intelligence

Consolidated	CURRENT MONTH			YEAR-TO-DATE		
	ACTUAL	BUDGET	PRIOR	ACTUAL	BUDGET	PRIOR
ABC Company						
XYZ Company						
USD Company						
Consolidated	1,485	1,541	2,238	3,403	1,765	990
Foreign Exchange Gain/Loss	3,724	2,282	3,226	1,469	477	1,902
Consulting Income						
Rental Income	3,628	211	707	2,184	1,935	3,298
Interest & Other Income	3,197	1,071	2,794	2,699	1,543	3,718
Dividend Income	2,924	2,690	1,438	529	747	2,250
Investment Management Fees	1,725	3,289	3,547	2,767	2,932	2,842
	<b>16,683</b>	<b>11,094</b>	<b>13,860</b>	<b>13,041</b>	<b>9,399</b>	<b>15,000</b>
<b>Expenses:</b>						
Accounting	2,429	2,615	2,988	1,053	3,528	3,385
Bad Debts	2,754	3,133	1,373	863	314	1,191
Consulting	820	2,410	2,468	2,159	2,652	3,162
Donations	3,247	1,013	3,479	2,954	1,757	1,335
EI and CPP	2,466	954	326	3,962	2,939	3,129
Memberships & Subscriptions	2,653	1,404	2,272	3,957	3,336	2,440
Miscellaneous Expenses	460	2,278	2,572	1,087	3,104	3,685
Office lease	1,094	1,813	765	2,178	2,520	625
Payroll Taxes	1,123	3,052	239	2,649	1,603	2,242
Salary	3,155	2,893	1,996	2,728	2,514	1,948
Benefits	2,774	345	1,661	3,085	3,166	1,558
Bonus	1,428	531	1,530	2,068	3,925	2,801
Payroll Incentives	3,727	3,763	266	422	246	3,266
Interest Expense	1,113	1,612	1,659	1,300	3,767	2,235
Depreciation	416	1,638	561	2,825	886	3,554
Grand Total	<b>42,692</b>	<b>42,844</b>	<b>42,025</b>	<b>51,971</b>	<b>52,309</b>	<b>51,667</b>