

Forecasting 101

Combining forecasting tools gets you the biggest bang for your buck

By Brenda McIntosh-Doell & Debra McAdam

THE OLD SAYING “THE WHOLE is greater than the sum of its parts” applies to a lot of things, but particularly to using more than one forecasting tool to make industry market predictions. By combining data from two or more reports, companies can significantly increase their market knowledge and therefore their competitive advantage.

Throughout the oil and gas industry, there are literally hundreds of reports and stats sheets offering different market perspectives and forecasts. Data from a number of these reports could be combined to produce a more in-depth, targeted and useful market view. Let’s look at two specific industry reports that offer distinct value on their own, but combined can provide companies with a more accurate assessment of the value of the Canadian oil and gas market region by region.

The Petroleum Services Association of Canada (PSAC) provides the quarterly *Canadian Drilling Activity Forecast*, as well as the semi-annual *Well Cost Study*, both of which are broken down into 15 specific PSAC areas.

The *Drilling Activity Forecast* offers an in-depth breakdown of drilling activity by PSAC area, and by well depth, status and type. By using this regional data, service companies can focus their growth plans on specific areas where their people, equipment and technology are best suited. In addition, companies can assess total market value by PSAC area, by identifying their pricing per area and multiplying the projected number of wells forecasted. Further, the Forecast data allows companies to track the maximum job capacity they can handle in each area and aids them in completing budgets.

The *Well Cost Study* identifies specific drilling and completion costs for 37 sample wells located throughout the PSAC areas. Service and producing companies use the Study data as a reference for AFE purposes and to estimate costs associated in a particular area.

With a few simple calculations using data from both documents, companies can determine total market value, and their own market share, by PSAC area. All that’s involved is a comparison of well types, depths and costs. Here’s a sample calculation (not based on real data).

Drilling Activity	0-1200m	1201-2200m	2201-3000m	3001-3600m	3601-4500m	4500+m	Total
Directional	2	1	3	4	2	1	13
Horizontal	3	1	2	0	0	0	6
Vertical	4	6	12	15	12	1	50
Well Costs (\$000)	\$1,500	\$1,900	\$3,900	\$6,600	\$8,400	\$10,700	
Total Market Value of Area				\$359,400,00			

If each PSAC area could be assessed this way, a company could easily identify total Canadian market value by summarizing all 15 PSAC areas. The problem is, of course, that all the activity areas are not the same. For example, Area 1 Foothills is predominantly gas, with deeper, challenging and therefore quite expensive wells. Area 2 Foothills Front, right next door, is mixed oil and gas, with shallower and much less costly wells.

Because well depths and types vary from area to area, there are always going to be some gaps in the data, no matter how many reports are used. Here’s a sample based on real data for Area 1.

Drilling Activity	0-1200m	1201-2200m	2201-3000m	3001-3600m	3601-4500m	4500+m	Total
Directional	2	6	18	17	10	2	55
Horizontal	0	0	0	1	7	11	19
Vertical	6	2	1	1	2	0	12
Well Costs (\$000)	\$1,035	\$???	\$2,385	\$???	\$8,295	\$???	
Area 1 Total Market Value				\$???			

The question is: How can these gaps be filled in to complete more accurate budgeting, forecasting and planning initiatives? Averaging is an option, but a dangerous



one. Total market value calculations based on averages can come out billions of dollars out of line with reality. For that reason, PSAC is identifying potential areas in

which closer links can be made between the *Drilling Activity Forecast* and *Well Cost Study*. The goal is to reduce the number of blank spaces in each area’s table, in order to give companies subscribing to both documents the most accurate picture of each regional market.

With tightly interconnected industry data sources, companies would be able to assess potential market share based on their specific pricing for a service or product delivered by PSAC area, multiplied by the number of wells for which it could provide the service or product. After completing these calculations for each area, companies could then summarize the total of all 15 areas to generate their Canada-wide forecast and market share assessment.

While a thorough correlation of the *Drilling Activity Forecast* and *Well Cost Study* is still in the works, there’s still plenty of connecting data available.

Proactive companies interested in accurate planning, budgeting and forecasting would do well to dust off their statistical reports and think about how they can link data from disparate sources to strengthen their market knowledge.

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