State-of-financial Analytic

and the technical approach to the problematic

Ideal-Analytics is a suite of software tools to glean information and therefore knowledge, from raw data.

Self-service, real-time, on-demand ad-hoc analysis and high performance exploration functionality
with plug-ability, scalability & security, available in both SaaS and on-premise model

Finance is at the centre of all management and business operations. All operations in any firm culminate to the study, analysis and presentation of the financial metrics – the final health of any enterprise is thus known only from financial figures.

The figures thus obtained have some discipline built-in and these are in present days parlance described through some static ratios. There are an impressive number of ratios that are being used to ascertain the health but the nature of ratios are all static and not time dependent. Time dependent or time varying models are also used although in very rare cases in terms of understanding the trend that might throw some light in the predictive analytic regarding financial ratios and metrics. Trend studies are quite modern and solve many queries of the management but the trends of the ratios, the derivatives of the ratios viz, the nth order rates of change of the ratios is the place the inner meaning lies hidden.

Business intelligence solutions and data cube or OLAP applications introduce high complexities to the already complex problems in the business studies through these financial ratios. Any trend study or predictive study needs the comprehension of fast changing hypotheses, many alternative propositions and very high mathematical operations. It therefore requires fast calculation, re-calculation, fast real time models and remodels and cannot run the luxury of having fixed, restrictive, complex and hard-to-dismantle models that OLAP has to go through.

Details lie in the transaction data bases and stores, where point-of-operation data keep getting updated. Time is very independent and any aggregation or average of the time dimension, rolling up of the figures on the time scale hides more than they reveal in terms of knowledge artefacts and meaning. A direct hit to the transaction data without in any way inhibiting the real-time data acquisition has to be the methodological approach to "mean" the meaning.

Ad-hoc, self-serving data manipulation for the analysis at a very fast rate can solve the perennially retained problem of finding the rate of change of measures across derived financial ratios. Currency of these values with respect to the currency of data, the automatic change in the derived result as and when there are changes in the transaction data is of prime importance and would take the highest value of import in any analytic studies.

Non-transient complexities in figuring out the meaning may look very impressive and successful but would lag behind in terms of the currency of data represented.

Various types or ratios:

What we generally get in existing studies is a multi-type set of many financial ratios derived from the aggregate data. There are operational ratios, profitability ratios, usage and usability ratios, and economy of scale ratios. Trend studies are shown from comparative studies of these ratios.

What we do not get are the differentials of these ratios with respect to the time dimension. Every order of differentials give different and very specialized meanings to the rate of the change of these ratios.

Financial ratios have their categorization as revenue based measures per unit volume of sale/production/labor input/resource input. Another set of categorization is the one with profitability where the operational costs are removed. Thus the set of profitability ratios are the obtained from the set of revenue ratios minus those of the operational ones. But these operational ratios are very difficult to fathom because the causes of these could be even extraneous to the firm's activities and can depend on the market value but the market cannot even tell the figure out the various reasons. This problematic leads us to conceive of newer and very special ratios that are only meaningful to a particular context and may mean not so much as a generalized measure. The technological approach to this is to be able to define on-the-fly ratios on an ad-hoc basis that would have to be self-serviced by the final user, and not wait for the IT professionals to form cubes

and models and preserve them for further analysis. Dismantling and remantling of models is a pain. As soon as the first phase is conducted then a time dimension comparison of the ratios with its previous period(s) are to be checked to fathom the rate of change of these. Any analysis with fixed dimensions will not always give the smartness needed for such an operation. Facts from one dataset when measured against dimensions of other datasets with some relationship or mapping is extremely helpful and we have gained extra mileage in service with our specialized product solution IDEAL-ANALYTICS [IA]. Any form of relationship at the row level is needed to map one to one correspondence of the values. Given this condition, we can strike a on-the-fly relationship of any measure with respect to the dimensions of other sets. Once that is found and struck the entire data-row-set can be pivoted through a very efficient and elegant mathematical solution. This unique mathematical exercise provides the product the speed that has attracted the attention of the most clients.

What are financials really?

Financial ratios go as a catch-all for any kind of profitability ratios. Ratios from operation are not financial ratios. Financial analytic must mean a rationalization of nominal value in money terms with respect to either the same kind of monetary inputs or some other kinds of monetary inputs. Thus financial analytic measure needs a further rationalization with respect to the particular rate of inflation of the currency of the land. Any change of the output rationalization first by the input unit and then by the rate of inflation is then to be further categorized with respect to the specific inflation rate of the industry. A generally rationalized metric does not mean much [albeit only general] when rationalized with respect to the general rate of inflation. It requires to be rationalized by the industry specific inflation rate, exchange rate [if the operation covers international market] and then the inflation rate of the foreign land- this gives the real picture of the measure. This is exactly why an ad-hoc level of calculation is needed for every set of product even within the same firm or operation. No pre-fixed model can provide any deep enough knowledge or wisdom of the performance of the financial ratios or financial measures.

Trend results can only mean something substantial if and only if they are rationalized with respect to the real output/input terms with respect to the same unit of monetary measures. Cross measures denominated by other sets of elements related but not embedded extraneous facts are not strictly financial analytic and often clutter the scope of the study.

Predictive studies can only mean something where it has to show much more than the plain vanilla trend studies. Trend studies are very nicely depicted through OLAP based business intelligence analytic solutions. The point however is to figure out the inner meaning of the trend through differential calculations with respect to the dimension of the periods. This is in slight distinction with the results obtained with respect to the time dimensions. OLAP based solutions are very good and yet very cumbersome when the time is to be further subdivided into finer denominations of time. Too much of drilling down is an overkill and data analytic tool comes very handy and appropriate in making the good enough drilling down and rolling up.

Data analytic tools that hit the transaction data set directly without taking help of any kind of intermediate data store can run smartly between various metrics and measures and not bother of saving the output but hitting the transaction data set every time thereby bringing up the latest state of the data position. This is why Data Analytic tools are giving a new meaning with much freedom to the study of Business intelligence, than earlier times when the study was constrained and constricted only to OLAP based solutions.

IDEAL-ANALYTICS [IA] the product solution has given the business analysts the necessary freedom they were looking for in seeking out the financial insight with appropriate nature and add full value. Statistical and stochastic studies are not always needed and the clients do pay for the heavy value and still cannot get free of the IT engineers and professionals. Here IA empowers the analysts with their own knowledge and insight into the subject.

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Analytics On-Demand

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