

Value Chain Management Capstone Case – Cheat Sheet

Just want to make sure that everyone is on the same page when it comes to some of the baseline calculations.

ROIC is the key quantitative factor that we are using in our decision model.

This requires multiple calculations, but they should be fairly straight forward.

In the appendices in the case, I have included a balance sheet for each market. The key entries on the balance sheet that you will need for your calculations are:

- Receivables: Less Allowances
- Inventories
- Property, Plant, and Equipment (PPE)
- Accounts Payable

Key Calculations:

Working Capital (WC) = Receivable + Inventories – Accounts Payables

Invested Capital (IC) = Working Capital + Property, Plant, and Equipment (PPE)

Asset Turnover (AT) = Sales/Invested capital

Operating Margin (OM) = Operating profit/Sales

Key Parameter:

Tax Rate = 35%

ROIC Calculation:

ROIC = OM x AT x Tax

Note: You will see some very large, very small, even negative ROIC. In this case you may find some of these values exaggerated. This is to point to the fact that you could have highly profitable, high value products as well as high cost, low profit products in a portfolio but it may not be obvious without going through some rigorous analysis.

Types of Assumption You My Make:

In this case study, I made the tradeoff of including more sensor product models with limited detail about each model instead of having a few models with a lot of details. For example, I could have mentioned details such as sensor model ATB101 is currently being used by 16% of providers in the automotive and transportation market. Users of this model are cutting edge organizations and are typically good candidates for upselling. This statement would likely lead you to a specific decision about this product even if the ROIC is low.

Instead I am giving more liberty for you to make these types of assumptions and provide your rationale and support. For example, you could establish a policy that we want to cap trade spending at \$4 per unit and run analysis with this consideration. Be clear about any of these types of assumptions that you make.

Some of you may choose to calculate ROIC for each year (2011, 2012, and 2013) individually for a single sensor model type. Others may choose to aggregate the years for a single sensor model. In this case you calculate the ROIC for year 2011 – 2013 for your analysis. The grading rubric accommodates either approach just provide the rationale for your decision.