



Case Study – Competitor Benchmarking For A Steel Company

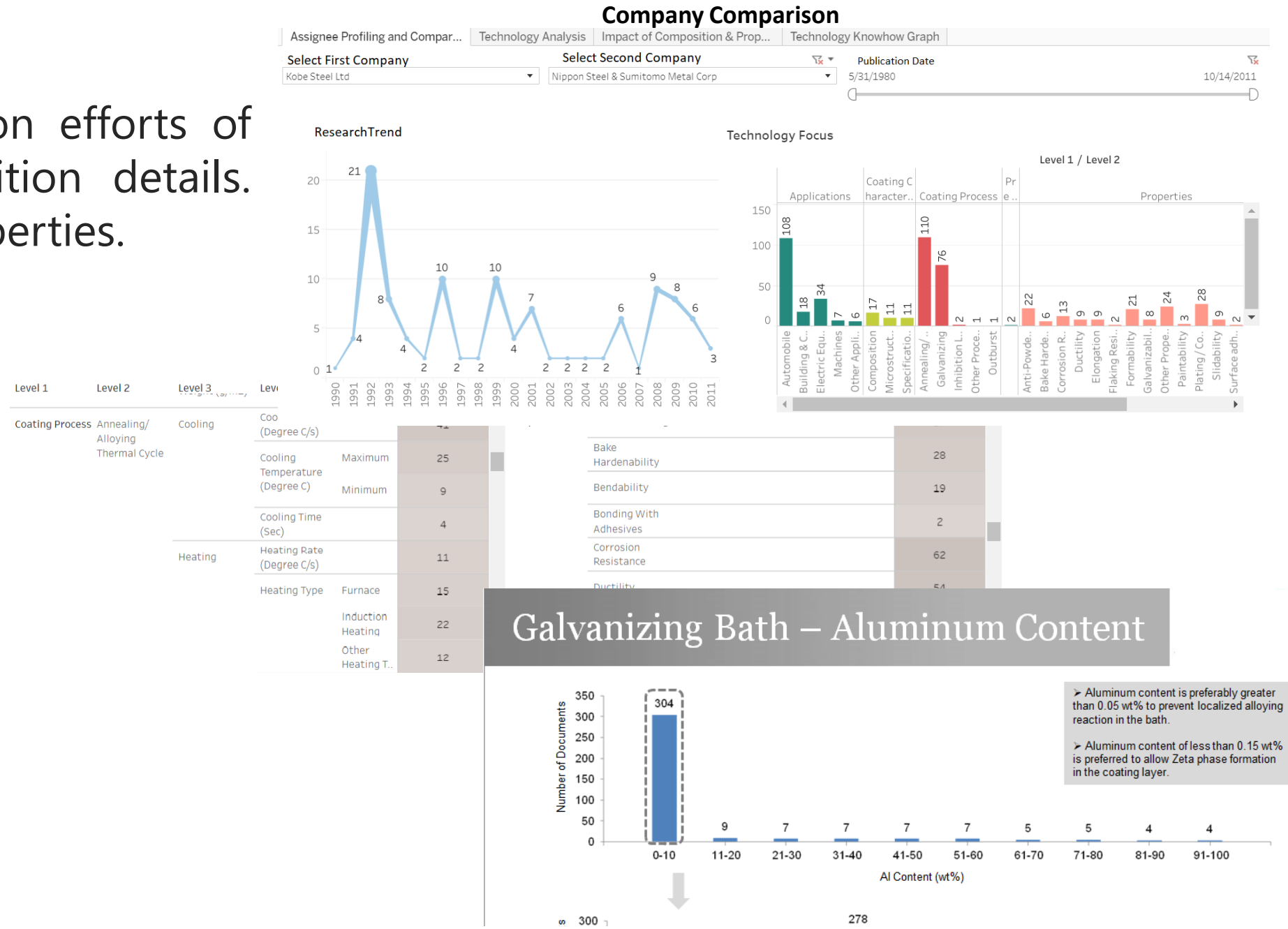
Value Delivered – The analysis revealed technology expansion efforts of competitors, coating properties being focused and composition details. Further, analysis also indicated impact of coating process on properties.

Problem to be solved – A leading steel manufacturer wanted to know what type of coating compositions are being researched by competitors and wanted to benchmark their research activity with competitors.

Solutions offered – GreyB studied the technology portfolio of multiple companies in metal coating domain and categorized the technology in various clusters like coating application in different industries, properties of coatings, coating process and compositions details of the coatings.

GreyB compared the technology portfolio of client with other companies to draw useful insights.

GreyB provided a presentation covering executive summary of the analysis and also delivered an online dashboard for internal use by clients team to compare various companies and coating parameters.



Element	Preferred Composition Range (weight %)	Reason
Titanium (Ti)	0.01-0.15	To prevent streak defect by fixing the solid solution carbon and nitrogen and to decrease yield stress.
Niobium (Nb)	0.001-0.02	To prevent streak defect and to decrease yield stress.
Carbon (C)	0.05 - 0.25	To improve weldability and achieve high ductility
Silicon (Si)	0.5 - 2.00	To prevent degradation of plating properties
Manganese (Mn)	1-3	To stabilize austenite and increasing residual austenite
Phosphorous (P)	0-0.1	To prevent embrittlement
Sulphur (S)	0-0.01	To prevent deterioration in impact resistance and cracking of a welded portion
Aluminium (Al)	0.3-2	To purify ferrite and decrease the yield ratio
Nitrogen (N)	0-0.005	To prevent decrease of ductility.
Boron (B)	0 - 0.005	To increase workability

