

Global electronics



**ASSIGN
BUSTER**

This case will examine the warning signs that existed within GEE to implement BBC as a possible solution and why BBC is a better solution when these warning signs exist. The implementation of the BBC system at GEE will also be highlighted as to degree of success, what GEE did well and what GEE could have improved upon. The key behavioral and technical factors that help or hinder a successful BBC implementation will also be examined. Recommendations for the Improvement of the BAM system will be highlighted followed by an overall conclusion on Gee's BBC system and continued Implementation

Into Actively Based Management (BAM). Analysis (Question 1) What preexisting conditions (or warning signs) existed within Global Electronics to warrant considering BBC as a possible solution? When these preexisting conditions exist, why does BBC offer a better solution than traditional cost systems? The warning signs that existed within GEE to warrant BBC costing began " In 1999, Gee's profitability spiraled downward with operating losses reaching \$100 million on sales of approximately \$650 million, causing management concern about the accuracy of the company's standard cost system.

There was a feeling that the standard cost system could not truly identify which of the company's products were profitable and which were not. The lack of an understanding of product profitability, a flawed product mix, and poor marketing and pricing decisions could have contributed to Gee's financial problems" (Brewer, Jars ; Browne, 2003, Para. 3). Other warning signs Included " From 1994-1999, the predetermined manufacturing

overhead rate had spiraled upward from 300 percent to more than 600 percent of direct labor.

As the manufacturing process became more technology driven, management worried that high-volume products and/or less complex products were being overcooked and that low-volume products and/or more complex products were being undercooked (Brewer et al. , 2003, Para. 4). A product engineer observed , "... The logic product line, which is a mature high-volume product, is bearing a lot of the total factory costs, thereby making the new lower-volume specialty products look cheaper. The perception is that we are doing well on all sides, except for logic, which looks marginally unprofitable" (Brewer et al. 2003, Para. 5). Another preexisting condition was that, " Gee's product engineers intuitively understood the shortcomings of the existing labor-based standard cost system. For example, they knew that producing low-volume, specialty orders added complexity to the manufacturing process that was not reflected in the cost system" (Brewer et al. , 2003, Para. 6). A product unit cost system and the direct labor-based standard cost system, both costs were tracked. With two sets of cost data available, managers could choose the figures that made their departments look best" (Brewer et al. 2003, Para. 6). These conditions all led to why an ABC costing offered a better solution. The ABC costing system was a better solution to the standard costing system because " ABC systems assign resource costs to activities, and they use volume and non-volume-related cost drivers to assign activity costs to products" (Brewer et al. , 2003, Para. 8). The ABC cost system would more clearly " define the activities, assign resource costs to

those activities; select activity drivers and determine driver quantities, and calculate BBC rates" (Brewer et al. , 2003, Para. 12).

Objectives of the BBC cost system that the standard cost system did not cover was " to improve product cost accuracy and optimize the product mix as quickly as possible in order to help improve GEE's unsatisfactory financial performance. The long-term objective was to evolve toward the practice of Activity- Based Management (BAM). More specifically, GEE anticipated that the BBC data could be used to help its product engineers project the cost impact of product design changes, and to help its process engineers and operations managers identify and prioritize process cost-reduction opportunities" (Brewer et al. 2003, Para. 13). BBC costing systems offered a better solution for GEE because, " GEE created its own customized BBC software called ACCURATE to capture the data inputs, interface with the standard cost subsystem, and calculate product costs" (Brewer et al. , 2003, Para. 20). After the BBC system was implemented, " There was a strong consensus across the plants that the BBC system resulted in both improved product-cost accuracy and greater product-cost visibility relative to the direct labor-based system.

In spite of the lack of training, announcing personnel intuitively believed that BBC captured the economics of the business better than the labor-based system. At a strategic level, this contributed to better marketing and product-mix decisions, and at the plant level, BBC improved relations with GEE customers" (Brewer et al. , 2003, Para. 28). The BBC system definitively offered a better solution when a product engineer commented, " The whole

price Justification process was very confusing to our customers and very frustrating for us.

Now, when someone calls, I can say this is what the flow is, this is what those activities cost, and this is how much your product is going to cost. This has been extremely helpful for our customers and us" (Brewer et al. , 2003, Para. 29). Clearly the BBC costing system was more beneficial to GEE than the standard system. Analysis (Question 2) Was the implementation of BBC at GEE successful? What did GEE do well? What areas of the implementation could have been improved on? What are the key success factors that lead to or impede successful BBC implementation?

Be sure to consider behavioral as well as technical factors. In the headphone of the GEE web article, Chris Richards, Director of MIS for GEE can be quoted, Implementing change in an organization is about ninety percent cultural and ten percent technical. This is because the organization dynamics, politics, and search for a champion that go on are the real issues that make or break the project" (Brewer et al. , 2003, Headphone Para. 2). There were key technical and behavioral success factors and impedance factors with the implementation of the BBC cost system.

The largest factor was Chris Richards pushing for an integrated accompanied implementation. And less risky, is how do you affect behavior?... For example, you can't run the arresting organization based upon achieving some desired gross margin when they are relying upon bogus costs to push the stuff that you don't want them to be pushing.... But, how do you motivate these people to go after the right set of products if you've got a bunch of

accountants sitting over here who have knowledge derived from some offline system that nobody else is aware of? (Brewer et al. , 2003, Para. 19). This behavioral factor led to the technical integrated approach that "... Would interface with Gee's general ledger, standard cost, and financial reporting systems, as well as its production planning, factory control, bill of material, and materials management systems. GEE created its own customized BBC software called ACCURATE to capture the data inputs, interface with the standard cost subsystem, and calculate product costs" (Brewer et al. , 2003, Para. 20).

The key technical success factors also include that " The BBC implementation was completed in the nine-month time frame, as planned" (Brewer et al. , 2003, Para. 22). " The project team streamlined the implementation process by only including activities within the cost model that it lived could materially affect strategic product-pricing and mix decisions" (Brewer et al. , 2003, Para. 22). Another key technical success factor was that the BBC system was derived by Chris Richards who said " the first thing you want to do is narrow your scope.

So, first you go in at a macro level to identify your high-cost activities and your optimal product mix. Then, you take those high-cost activities and drive the analysis down to the micro level so you can truly understand what is driving your cost and what type of performance measures are appropriate" (Brewer et al. , 2003, Para. 23). Chris Richards' expertise really helped champion behavior to use the new BBC system data. " The BBC model-building and data-gathering processes at each plant were managed by members of the centralized/functional project team.

Plant-level employees were expected to provide activity definition in addition to resource driver and activity driver information, while the project team's role was to supervise the implementation across plants" (Brewer et al. , 2003, Para. 24). Another key behavioral success factor was " having a core project team that coordinated everything helped ensure consistency across plants" (Brewer et al. 2003, Para. 25). Key technical and behavioral impedance factors to the implementation of the BBC system include, "... We made the mistake of sending a whole new core team to Malaysia that really wasn't involved in the front end as much... (Brewer et al. , 2003, Para. 25). This new team did not have the full BBC know how and this affect Malaysian plant behavior in the usage of the new BBC system. Any behavioral impedance was that " The training provided by the project team for the plant-level employees was negligible. Rather than spending time on explanations and training, the focus at the plant level of this pop-down implementation was on making people participate in the BBC process regardless of their personal beliefs. The decision to implement BBC had been made at headquarters.

Plant-level personnel were not consulted prior to the decision, but were subsequently expected to accommodate the demands of the project team in a timely manner" (Brewer et al. , 2003, Para. 26). Overall the implementation of the BBC system "... Had been partially successful. The first phase succeeded in delivering timely, revised product-cost information for strategic pricing and mix decision productivity improvement and cost reduction. Brewer et al. , 2003, Para. 60). Analysis (Question 3) How could GEE improve

the success of the BAM system? The BAM system needed the same support from top management as the BBC system.

Chris Richards' resignation did not help the "championing" of the BAM system when management refused to support him. "The problem is that everybody has so much to do that if their job does not demand that they become totally conversant in BAM, they will simply skirt around it" (Brewer et al. , 2003, Para. 35). BAM needed to be a daily job consideration. "Not only was training at the "kickoff stage of the BBC implementation minimal, but the commitment of resources to training during the BAM stage was virtually nonexistent" (Brewer et al. , 2003, Para. 36). More commitment to BAM resources was also required to "... Even a relational database with all the activities and rates in it.... The way I see BAM is that all your costs should be available in such a way that you can slice and dice them to look at any cross-section you want" (Brewer et al. , 2003, Para. 39). "The amount of time needed to create an integrated and fully relational BBC system to provide these benefits was not satisfactorily discussed" (Brewer et al. 2003, Para. 41). Other improvements on information like "... Activity-- based cost information is still not being made available to our front-line workers" (Brewer et al. 2003, Para. 44) would improve those " "Pockets" of BAM advocates across the plants. These people appreciated that the BBC system presented cost information in a language that was intuitive to them" (Brewer et al. , 2003, Para. 45). The largest improvement to the BAM system will need to include throughput bottlenecks as per an operation managers' comment: "What good does it do us to lower a product's BBC cost in a fixed cost environment, hen the net result of this decision may actually lower the

throughput generated by the plant? (Brewer et al. , 2003, Para. 59).

Conclusion It can be seen from the case that BBC costing systems do provide more accurate information for better product pricing decisions. The implementation of the BBC system was largely successful except for more adequate training on the operational side. This would have helped promote a better conversion to BAM. With top management not supporting the BAM system it is unclear how GEE can expect complete BBC system success.