

**Dell Computer Corporation:  
Product Development**

Student Name  
Professor Pinegar  
BUS 341 A  
April 8, 2003

Student Name  
BUS 341 A Marketing  
April 8, 2003

Michael Dell, CEO  
Dell Computer Corporation

Dear Mr. Dell,

The computer industry, as you well know, is a fast-paced and ever changing business environment. Driven by consumer needs, wants and demands, it is vital for companies such as Dell Computer Corporation to recognize relevant trends and to satisfy a market that requires the most innovative technology available. Now, more than ever, consumers are demanding the most lifestyle-friendly computers available. In particular, the market for laptop computers, which is growing at a much faster rate than that of desktops, is pursuing lighter, more durable computers with the greatest performance capabilities.

One of the most crucial decisions to be made at the current time regards the type of battery that will be used in the latest laptop models. Consumers want longer and more efficient battery life, without compromising other features. Specifically, the question is whether to design a laptop that will incorporate the older, proven technology (NiHi), or to design with the expectation that a new, better technology will be available for use, despite the risk that it may not come to completion (LiOn). Each of these options clearly has its own risks. In addition to these, some combination of the two design options could be implemented. Creating an over-design product, for example, might be equally beneficial. Clearly, though, the best option is to pursue a dual development path.

The dual development path entails initially designing two separate models; one which would incorporate the current, proven battery technology (NiHi), and another in which the latest technology would be used (LiOn). Once the availability of the LiOn technology becomes clearer, a decision can be made about which product should be brought to market. Aside from the fact that the dual path is expected to yield the greatest net margin, this is the only option that can cater to all of the market trends as dictated by consumers without risking a loss of market share and revenue.

The option to design a product using NiHi technology alone is just as risky as the option to design for LiOn. This option will work only if LiOn technology does not become available. If LiOn does become available, and Dell pursued only NiHi design, then your company would be left behind with a decrease in market share and lost sales revenue as competition pulled ahead through better technology. Likewise, if Dell designs solely for LiOn technology and it does not become available, the company will have invested in a useless and unmarketable product.

The other option is to over-design a single product so that it has the capacity to carry either battery. The major problem with this design is that the product would most likely have to be a little larger and probably heavier for no reason other than wasted space. This might not sell in a market that is moving toward more travel-friendly laptops. Again, as in the previous cases, Dell may suffer at the hands of the competition.

The dual-path design has few problems, and none that are as clear or certain as those posed by the other options. Whether LiOn technology becomes available or not, the current market trends will be recognized and accounted for in both models that would be produced. Both could be made as durable and as light as possible, with the best

performance capabilities available. The battery would depend only upon whichever technology is available, rather than Dell's final product. No matter which design within the dual-path is finally brought to market, Dell will have a much greater chance to gain market share and to increase sales.

The problems with the dual path are few and quite manageable. Firstly, the cost of designing two different products would be relatively nothing in comparison to the expected net margin. In addition, though, some non-financial problems may arise. For example, one major concern is the reaction of the engineers when one of the designs is not produced in the long run. This could be rather easily neutralized through management, so that employees would see success no matter which product is completed. Perhaps individuals could work on both designs rather than just one. However resolved, all of these issues are relatively small in both number and degree when compared to the other development options.

The dual-path development is without question the most beneficial option of the four presented. In pursuing it, market trends and consumer demands will be satisfied without the risk of lost market share or sales revenue. As a result, the expected net margin is much greater than that of any of the other options. Clearly, with regard to battery life, the dual development path is the best design option.

Sincerely,

Student Name