16 Instructing Through Price Wars

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Revised October 29, 2017

"A few things matter most. Find those things." - Richard Koch

What's wrong with this LINKS Marketing Strategy Simulation industry, based on these Quarter #10 top-line summary results?

	Mean	Firm1	Firm2	Firm3	Firm4	Firm5	Firm6	Firm7
NetIncome [$MM]	-2.6	-0.6	0.4	-8.3	-5.3	-2.3	-1.8	-0.1
Unfilled [000s]	24.2	7.9	37.1	93.5	0.0	0.0	15.2	15.9
Market Shares [10]		9.4	11.0	16.7	14.6	16.0	16.5	15.8
Market Shares [9]		9.4	14.5	14.7	8.8	17.4	16.4	18.9

INDUSTRY DEMAND	Region 1	Region 2	Region 3
HYPERWARE			
Quarter 10	247,958	170,836	418,057
Quarter 9	235,072	175,025	374,929
METAWARE			
Quarter 10	286,615	231,433	249,713
Quarter 9	218,003	159,257	175,426

Profitability in this LINKS industry is terrible! Six of the seven firms are losing money … and, the only profitable firm (firm 2) is barely so. Massive unfilled orders exist, caused by a combination of industry-wide under-production (resulting in unfilled orders) and, presumably, under-pricing.

Why is this happening in this LINKS industry? Total industry demand isn't the culprit, since industry demand has increased in most regions and categories (hyperware and metaware) from Quarter #9 to Quarter #10, in spite of substantial industry-wide unfilled orders.

So, what's left? It must be prices and an industry-wide price war … and a failure of these student teams to manage their simulation firms for profitability.

Root Causes of Price Wars

The root cause of price wars in competitive business simulations is undisciplined student-teams who don't attend or give enough weight to the profitability consequences of their customer-facing programs … especially with regard to pricing decisions, product|service configuration|design decisions, and associated variable costs and margins.

Low price is an easy and convenient competitive "weapon" that always attracts customers and increases sales volume and market share, at least in the short run. But, are low prices really profitable and sustainable … and wise?

Excluding gross input errors by students, there are three principal paths that lead to price wars in competitive business simulations.

First, students mindlessly pursue volume and market share without sufficient regard for profitability, ultimately leading competitors to feel compelled to match low prices to maintain their own sales volumes and market shares. Perhaps it's the old business axiom at work: "Volume will save us." To illustrate, a firm-7 team member in the LINKS industry above writes the following to teammates (received by LINKS Simulations as a "reply all" e-mail message sent to all firm-7 team members from an original e-mail message sent by LINKS Simulations to all firm-7 team members):

"At least we aren't losing as much money as the rest of the folks."

True enough, but your firm is still unprofitable!

Second, product|service reconfigurations occur that dramatically increase variable costs and decrease margins without corresponding price increases. Margin reductions mean that profitability is difficult or impossible to achieve, even with "hoped-for" (fantasized?) large sales volume increases from the product|service reconfigurations. The graphic clip below from the LINKS Simulation Database illustrates this problem. With variable costs of $449, a price of $300 is untenable. How could a simulation team miss such an obvious thing?

Source: LINKS input web-screen clip of an actual LINKS firm's pricing inputs

Third, students apparently assume that competitors won't notice or won't respond to a firm's price decreases. **Price decreases are visible, easy to detect, and easy to follow** (at least in the short run). So, competitive advantage from lowering price is, at best, temporary … and it's definitely dangerous, since a firm's price decrease might lead competitors to follow without regard for profitability. Even a thoughtful LINKS firm that orders relevant LINKS price sensitivity analysis research (Research Study #24) must remember the implicit assumptions associated with these volume, market share, and gross margin predictions:

- These price sensitivity analyses isolate the impact of price on market share, while holding other market share drivers constant (product quality, service quality, and availability perceptions in the LINKS products simulations and design quality, experience quality, and accessibility in the LINKS services simulations).

- These market share predictions and subsequent estimates of gross margins are based on the assumption that competing products|services don't change their customer-facing programs (generate demand programs in the LINKS products simulations and marketing programs in the LINKS services simulations). Obviously, large price changes will tend to evoke competitive responses.

- The reported market shares in Research Study #24 are long-run estimates of market shares if a firm continues with all current customer-facing initiatives (configurations, marketing spending, service levels, etc.) as they are now and so do competitors. Market infrastructure issues (like unfilled orders status) are not considered.

Source: Research Study #24 descriptions in the LINKS manuals.

Good instructor practice in the face of price wars includes initiatives, efforts, and actions before- and after-the-fact.

Before-The-Fact Instructor Actions

1. Instructors should advise students (in the course syllabus) that profitability matters! Remember the Ferengi proverb: "Volume without profit has no honor." For your within-simulation grading component (presumably based on the LINKS multi-factor performance evaluation system), it is recommended that instructors include the proviso that “consistent” lack of profitability will lead to a within-simulation grade no higher than “average” regardless of a firm’s standing on any other performance metric (such as market share).

2. While not prohibiting price decreases, instructors are encouraged to adopt the protocol that students must seek instructor (“CEO”) pre-approval before any price reduction can be implemented. The basis of this approval is a “modest” pro-forma financial analysis of predicted short- and long-run profitability after a proposed price decrease. Instructors should carefully review the industry demand and market share assumptions/forecasts included in such a pro-forma financial analysis and question students on the empirical basis for such industry demand and market share assumptions/forecasts (i.e., which LINKS research studies were used to form such assumptions/forecasts?). And, instructors should query students about their assumptions regarding how competitors will react to a price reduction. Instructors might require such an analysis to be submitted several days before a LINKS input submission deadline, to permit suitable time for review and perhaps the scheduling of a meeting with the firm proposing a price reduction.

3. In LINKS game-run schedules, include the provision for activating at least one additional product (one additional service in the LINKS services simulations) fairly early in the schedule. This provides the opportunity for firms to customize offerings to particular regions, thus tending to lead to more niche offerings priced at higher levels.

4. In LINKS game-run schedules, include the provision for activating one or more additional regions as the LINKS event unfolds. Additional regions provide growth opportunities for everyone, even lagging firms. And, growth opportunities tend to discourage price wars.

And, of course, instructors should regularly remind their students about useful LINKS tools, like the Decision Inputs Audit and the Pro-Forma Financial Projections.

After-The-Fact Instructor Actions

1. During scheduled private “Presidential Review Meetings” throughout a LINKS event, emphasize profitability in instructor discussions with LINKS students, particularly for lagging firms. Instructors should quiz students regularly on their plans for improving long-run profitability.

2. Instructors should require unprofitable firms to immediately raise prices. For example, all firms losing money might be required to immediately raise their prices at least $100 for every product in every channel and region (in LINKS services simulations, for every service in every region).

3. Require any unprofitable firm after any LINKS round to schedule an immediate private “Presidential Review Meeting” with the instructor to review the firm’s performance. Alternatively, instructors might require that any unprofitable firm must respond to the following memo from the “CEO”: “Profits are unacceptably low. Please provide a clear, fact-based plan for dramatically improving profitability very soon. Management teams of firms unable to generate profitability are subject to termination/firing. No one wins in business by being the last to go bankrupt!”

Postscript

Industry-wide price wars, with associated lack of profitability, in competitive business simulations can be stopped by vigilant instructors who just do not passively accept continuing industry-wide unprofitability and, generally, lack of reasonable profitability.

The approaches detailed in this LINKS White Paper provide practical advice to instructors for coping with price wars when teaching with competitive business simulations such as the LINKS Simulations.