

# HOW TO MAKE STRATEGY SIMULATIONS RELEVANT IN TIMES OF PANDEMIC

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## ABSTRACT

**Purpose.** The purpose of this teaching note is to share examples of how business capstone professors can enhance strategy simulation teaching with use of current business news. Professors can augment the use of strategy simulations by comparing simulation decisions to current, real-world decisions made by companies, as reported in mainstream business news, even in times of pandemic. *Glo-Bus*© Strategy Simulation was used as an example of the many available commercial strategy simulations. The *Wall Street Journal* June 3, 2020 was used as a sample of mainstream business news. This study addressed a gap in the literature because published articles about business capstone strategy simulation (primarily using *Capsim*©, *Marketplace Live*©, *Micromatic*©, *Glo-Bus*©) did not compare simulation decisions to real-world decisions. **Findings.** Examining one day of real-world business news decisions, June 3, 2020 (in times of pandemic) revealed similarities to decisions made by *Glo-Bus*© simulation participants. **Recommendations.** This paper gives a list of teaching techniques that can be used to engage simulation students with current business news to enhance their simulation learning. **Limitations.** Further research is needed to determine this technique's impacts on simulation performance and learning. This paper only presents the concept, not the results of its use. **Value.** Strategy simulations are used broadly by business schools, and specifically, *Glo-Bus*© Strategy Simulation is used globally (22 countries) by approximately 317 business schools with 32,600 students per year (Gamble, Thompson & Peteraf, 2013). Also, findings of this study can be applied to other non-*Glo-Bus*© strategy simulations (*Capsim*©, *Marketplace Live*©, *Micromatic*©, etc.). Accordingly, more research is needed to measure and report effects of this teaching technique.

## INTRODUCTION

### BACKGROUND AND LIT REVIEW

**An overview of the business capstone course: setting, students, methods.** To gain a more contextual view of strategy simulations, it is appropriate to scope out to a wider view of where they are delivered, the business school capstone course. What follows is an overview of the business school capstone course, which importantly corresponds to the nature of strategy simulations (Miles et al., 2014; Salas et al., 2009). Alstete & Beutell (2016) stated, "To finish the learning process effectively, meaningful and valuable culmination of experiences in the final year of the curriculum is often achieved in a required capstone course" (p. 174). Alstete & Beutell (2016) also referred to the business capstone course as a means to solidify prior learning. Integration and synthesis of prior learning is a goal of capstone courses – requiring students to take a broad view of a business enterprise which includes multiple business functions (product, marketing, compensation, operations, finance, etc.).

Business school capstone courses use strategy simulations, both for the competitive energy they provide and for the benefits of departing from the real world to the hypothetical one, allowing students to make life-like corporate decisions in a risk-free simulated setting (Schwarz, 2013). In addition to simulation, these courses commonly use a variety of case study methods. Case studies include: 1) published historical studies, 2) studies of companies who are business school sponsors, and 3) live case studies, delivered via simulation or via a consultant approach to address a current business problem at an internship or other company which provides access to pro forma reports.

The published case method involves students reading lengthy documents which report a company's historical challenges and data. Students then apply strategic analysis models learned in class. Some examples of commonly used strategy models include: Porter's Five Forces, Balanced Scorecard, and Strategic Group Map (Gamble, Thompson et al., 2013). Additionally, students calculate financial ratios and declare the company healthy or unhealthy versus its competitors or versus its past. Students conduct similar analyses for companies where they have interned or for companies which are sponsors of the business school (Finch et al, 2015).

All of these case study techniques are designed to show students how the formulas and models they are learning in school are used by real-world companies. The idea is that students can practice applying business school concepts. The down side to these methods is the reading and poring over historical and complex reports from which students are somewhat removed (Gove, 2012). Simulations, conversely, connect the student more directly by giving them real-time responsibility to make the decisions (cash allocation) that populate the reports.

**Simulations as live case studies.** Since traditional case studies (published, historical, consultancy, and internships) have disadvantages – overly complex pro forma data, historical/less urgent perspective, and a lack of exposure to the total enterprise (multiple functions of the business), simulations are used as a type of "live case study" (Karriker & Aaron, 2014). Karriker and Aaron (2014) described simulation enactment as "providing students with experience that goes beyond the hypothetical, moving them from an outside, recommendation mode to one of ongoing senior management level responsibility for company outcomes (p.

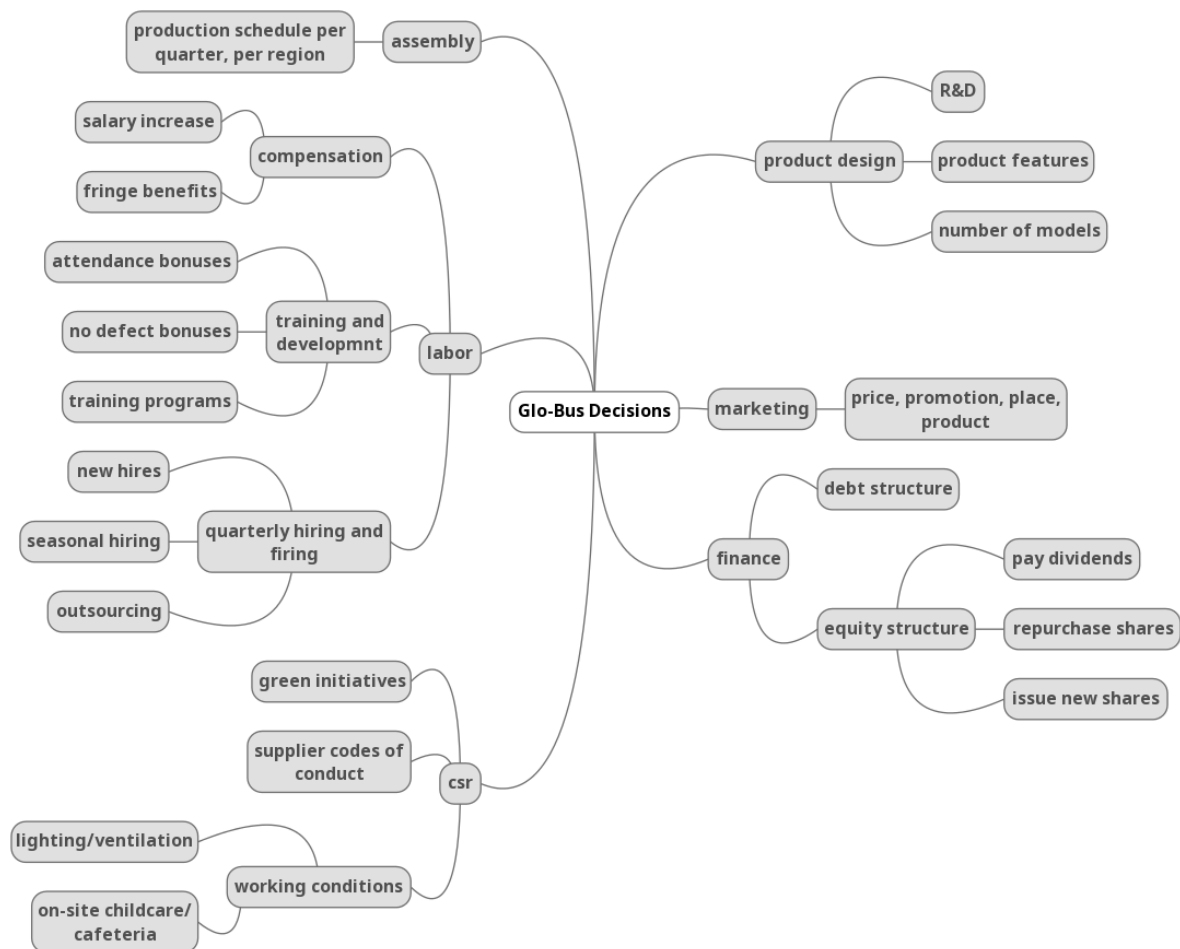
While the literature recommends a balance of case study types (historical, consultancy, and live simulated), it also stresses the importance of the instructor’s/game administrator’s role (Faria et al, 2009, Kling et al, 2011) when simulations are used. Arnab et al (2012) examined various simulation teaching methods and found the educator’s role to be pivotal -- reporting a study of two student groups playing the same business game but under different circumstances. One group played alone or with peers. Another group played with or without facilitator support. In both cases, playing with peers and with facilitator support were highly correlated to learning (measured with pre and posttests). This finding magnifies the importance of effective teaching methods (like the one reported in this paper -- using current business news as augmentation).

Alstete & Beutell (2016) noted the need for more research about capstone pedagogy, noting that business schools’ Pedagogical Content Knowledge (PCK) (Brown, Arbaugh, Hrivnak & Kenworth, 2013) needs monitoring. They stated, “It is our contention that all schools carefully examine capstone courses in light of pedagogical content knowledge, instructional techniques, and delivery formats” (p. 173). Alstete & Beutell (2016) noted that “simulation-based learning has been identified as strongly in need of more well-planned classroom guidelines to ensure effective learning” (p. 179). This paper suggests one such guideline, the use of current business news to explain simulation decisions.

Below, an overview of software mechanics is presented, revealing the “critical thinking disposition” (Bell & Loon, 2015) required from students and led by instructors in strategy simulations.

**Strategy simulation mechanics.** The commonly used strategy simulation, Glo-Bus© (used by 317 universities, 32,604 students in 2018), is used here to explain the general mechanics of grid-based strategy simulations (Garris et al, 2002). Other simulation software packages (Capsim©, Marketplace Live©, Micromatic etc.) use similar mechanics; therefore, this teaching note could also be applied to those non-Glo-Bus© simulations. Glo-Bus: Developing Winning Competitive Strategies© (Thompson et al., 2013) is an online simulation in which student teams compete with each other in the international specialty camera industry. The hypothetical industry is fully represented by the student teams in the class, representing the full pie of market share. The industry

**FIGURE 1**  
**Glo-Bus© Decisions, Thompson et al., 2013**



covers four geographical regions (North America, Europe-Africa, Asia-Pacific, and Latin America). Decisions include: product design, marketing, compensation, facilities/labor, social responsibility, and finance (see figure 1).

When designing cameras, students make decisions about various product design features which differentiate products from competitors and which contribute to an independent rating of Product Quality, notated by a “number of stars” rating system. For example, students decide how much cash to allocate to Research & Development, which assures design technology stays competitive and agile in the future. Companies also decide how many models to offer. This is one of many examples of a complex and interrelated decision. When companies offer more models, they satisfy consumer desire for choice and gain market share, but because more models result in more manufacturing complexity, this decision results in higher costs due to more defects and more warranty claims.

To support product design decisions, students must construct carefully analyzed marketing plans. Using syndicated reports (similar to real-world Nielsen and IRI market data), students can ascertain how competitive their marketing efforts are and make changes to match or surpass other firms’ marketing expenses (see Appendix 4 Competitive Intelligence Report). Some examples of marketing decisions include: price, promotions, number of retailers, tech support, warranty periods, and advertising. These marketing plans are played out in each geographical region, so students can use global allocation principles to decide how much to invest in each region, and which regions to try to grow, maintain, or withdraw from. All of these decisions can be informed by the various syndicated reports which reveal how a company’s marketing plans compare (better than or worse than industry average) to the other companies in the industry (run by other students in the class).

When students access these syndicated market research reports each “year” (often played out in weeks or days of a semester), there is a competitive excitement in the air. Students report feeling energized by trying to beat the competition with strategic decisions (Gove, 2012). In addition to beating competition on product design and marketing plans, companies also must maintain cost and revenue balances to stay profitable and meet investor expectations. All fictional companies are publicly owned and traded on the NASDAQ stock exchange (see Appendix 1 Financial Statements).

Other cost management decisions include compensation, facilities, and social responsibility. To assure assembly meets forecasted product demand (based on algorithms that consider competitive aspects), students must schedule production that delivers needed inventory without costly. Similarly, students must make labor decisions about compensation (salary, benefits), training, and hiring. If a company decides to expand its factory (to meet projected demand), they must pay the construction and regulation costs of that expansion.

To stay in good standing with local communities and to stay current with green and lean production standards, students must also decide how much to invest in charity, green manufacturing practices, facility ventilation and lighting, and supplier codes of conduct. All of these investments require substantial cash outlays, but they contribute to a company’s efficiency and image rating, two measures that have indirect impacts on costs and market share.

Finally, to assure enough cash to cover all multi-functional costs, students must manage a cash flow statement, assuring they have enough cash for each quarter’s expenses. If there is not enough cash remaining from previous years and quarters, companies must decide if they want to increase debt or increase equity. In either case, financial implications must be considered – with the help of syndicated reports (see Appendix 3 Selected Financial Statistics Data) which show industry-wide trends for common financial ratios like Return on Equity ROE, Earnings per Share EPS, and Dividend Payout Ratio. Industry financial reports also provide overarching data about each company’s revenues, net income, taxes. With these detailed reports, each company can compare its financial strength to that of industry averages and specific competitors. This type of total enterprise planning and policy making is extremely complex and requires careful analysis, enhanced by instructor guidance and debriefing (Crookall, 2014; Edwards, 2005).

## **LIMITATIONS**

Now that the simulation details and mechanics have been explained, it is important to note the limits of this study. Limitations of this teaching note applies to the entire domain of research about simulations. The literature was not conclusive about how simulation performance is related to learning (Adobar & Daneshfar, 2006; Clapper, 2015).

This teaching note examined the use of current business news (article headlines and summaries listed in Appendix A and Table 2) as a tool to help students understand simulation decisions and how they resemble decisions being made in real-world publicly traded companies, as reported by mainstream business news. As a representative of strategy simulations, Glo-Bus© was used, and as a representative of mainstream business news, The Wall Street Journal was used. This note does not address the measured effects of using the teaching method -- that should be addressed in future studies.

## **RESEARCH QUESTION**

Do Glo-Bus strategy simulation decisions reflect real-world decisions (listed in Appendix A and Table 2) being reported in The Wall Street Journal business news?

## METHODS (POPULATION, SAMPLE, VARIABLES, DATA)

### POPULATION

This teaching note can be applied to the larger set of all grid-based strategy simulations used by hundreds of business capstone courses in U.S. and international business schools, some of which are listed below.

- Marketplace Live© <https://www.marketplace-simulation.com/>
- Capsim© <https://www.capsim.com/>
- Micromatic© <https://oaktreesim.com/Micromatic-V6/>
- Business Policy Game© <https://bpgsim.com/>
- Glo-Bus© <https://www.glo-bus.com/>

### SAMPLE

One commonly used grid-based strategy simulation, Glo-Bus© was used as a representative of the many available commercial strategy simulations. Glo-Bus© Strategy Simulation is used globally (22 countries) by approximately 317 business schools with 32,600 students per year to teach corporate strategy in senior business capstone courses (Gamble, Thompson & Peteraf, 2013). Most strategy simulations include the basic components of product, marketing, compensation, facilities, social responsibility, and finance.

### VARIABLES

The strategy simulation decisions considered for this teaching method are listed in Table 1.

**TABLE 1**  
**Glo-Bus Decision Screens and Corresponding Decision Types in Each Screen**

Decision Screen	Decision Types
Product Design	Product features Number of models R&D investment
Marketing	Search engine optimization Website design Advertising Price promotions Retailer support
Compensation	Base wage Incentives Bonuses Fringe benefits Training
Facilities	Workspace expansion Workstation installation Overtime Robotics upgrades
CSR Corporate Social Responsibility	Charity donation (% of profit OR cash amount) Green manufacturing Renewable energy program Improved working conditions Supplier code of conduct compliance
Finance and Cash Flow	Bank loans/bonds Stock issuance Loan repayment Stock repurchases Dividends

## RESULTS

Glo-Bus simulation decisions do reflect decisions made by companies reported in current business news, as evidenced by Wall Street Journal Business and Finance, June 3, 2020 (see Table 2).

**TABLE 2**  
**Sample of Decisions Reported by Wall Street Journal, June 3, 2020 (see Appendix for screenshots)**  
**and Which Glo-Bus Decisions Are Similar**

Article title	Summary	Decision	Relevant Glo-Bus Decision Screen (and Specific Type)
Customers Come Back to Campbell's Soup	Packaged foods sales increased during pandemic stay home orders.	Increase advertising about convenience and affordability  Speeding up product development to keep new customers	Marketing (advertising)  Product design (R&D)
Lyft Says Demand Picking Up as Covid-19 Restrictions Ease	Even with resurgence, number of rides 70% weaker compared with last year.	Cut 17% of its workforce and reduced pay	Compensation (decrease workstations)
Mall Owner CBL Misses Debt Payment, Seeks Renegotiation	CBL & Associates failed to make interest payment of \$11.8 million to bondholders.	Missed payment in order to explore alternative strategies	Finance (debt repayment)
Bain, Cyrus Picked as Top Bidders for Virgin Australia Assets	Virgin files for bankruptcy protection after pandemic brought air travel to a near halt.	Bain, and Cyrus, both well-funded and with deep aviation experience, could purchase assets	Finance (stock issuance)
Zoom Lifts Full-Year Sales Outlook as Coronavirus Boosts Demand	Zoom has had to rent capacity from third-party cloud vendors such as Amazon and Oracle.	Add more server capacity to bolster margins (lower rental costs)	Facilities (workspace expansion)
Pandemic to Jumpstart Spending on Data Tools at Manufacturers	Manufacturers will be spending far more on data-management and analytics tools after the pandemic and will be using those tools for deeper insight into operations.	Norsk Hydro is building its data capabilities to remotely monitor plant equipment, which engineers had limited access to during the pandemic	Facilities (robotics upgrade)

## DISCUSSION

### IMPLICATIONS AND RECOMMENDATIONS FOR PRACTICE

The set of articles listed above shows that strategy simulations do reflect reality and can help students perceive relevance of simulation decisions. Helping students to see the relevance of their strategy simulation use can be achieved with various business news teaching methods, listed below.

- **Headline surveying.** Assign students to read and analyze various headlines or articles from the current business news -- delivering an in-class presentation or an online post about how the decision being reported corresponds to decisions made in strategy simulation. This technique can be used at a topline, brief level or at an in-depth analytical level -- assigning students a quick 5 minute survey time or an extended one week project due date.
- **Public company focus.** Have students choose one publicly traded company to follow throughout the semester or concurrent with the simulation. Each week, have students submit findings (class presentation or online post) about how the followed-company's news relates to simulation company decisions.

- Mock CEO round table. Have students role-play a CEO round table at which CEOs of the news-covered companies discuss the reported decision and how it reflects strategy theory taught in the capstone course.
- CEO letters. Have students write hypothetical letters to CEOs covered in the business news, detailing how that students' simulation decisions are similar to or different from the one reported in the news article. Sending the letter to the CEO is a fine option, but not necessary for learning.

## RECOMMENDATIONS FOR FUTURE RESEARCH

Future studies should measure this teaching technique's effects on student learning and on student perceptions about strategy simulations. Some possible future research questions are: 1) Using one control group (no business news comparisons in class) and one test group (business news comparisons in class), how do student perceptions of simulation realism compare? 2) Using the same control groups, how do simulation company performance metrics compare?

## LIMITATIONS

Limitations in this note include: 1) convenience sample of one simulation software, 2) one news outlet's strategy decision articles, 3) lack of empirical evidence about technique's impact on student perceptions of realism and student learning.

## CONCLUSION

Answering the literature's call for "more well-planned guidelines to ensure effective learning with strategy simulations" (Alstete & Beutell, 2016, p. 179), this study examined similarities between current real-world business news and simulation decisions. The finding is that using current business news can offer opportunities for strategy simulation professors to enhance student understanding and realism of simulation decisions. This finding should be further explored with empirical studies measuring changes on student perceptions of simulation realism.

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## APPENDIX A

### Screen Shots of WSJ.com Headlines, June 3, 2020 Business and Finance Section

#### BUSINESS

### Customers Come Back to Campbell's Soup

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For Campbell, the coronavirus pandemic has accomplished what years of corporate strategy could not: get customers back to stocking their pantries with the company's iconic red-and-white cans of soup.

#### BUSINESS

### Lyft Says Demand Picking Up as Covid-19 Restrictions Ease

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The company said demand for rides climbed in recent weeks as people began venturing out following Covid-19 lockdowns but remains well below levels seen a year earlier.

#### FINANCE

### Mall Owner CBL Misses Debt Payment, Seeks Renegotiation

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Mall owner CBL & Associates Properties said it failed to make an interest payment of \$11.8 million to bondholders on Monday, becoming the first major retail landlord during the coronavirus pandemic to take this step toward a bond default.

#### DEALS & DEAL MAKERS

### Bain, Cyrus Picked as Top Bidders for Virgin Australia Assets

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Australia's No. 2 airline filed for bankruptcy protection after the coronavirus halted most air travel and drew interest from more than 10 parties at one point.

#### TECHNOLOGY

### Zoom Lifts Full-Year Sales Outlook as Coronavirus Boosts Demand

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The company's sales more than doubled in the first-quarter, as a surge in users working remotely during the coronavirus pandemic turned the video-chat app into one of the go-to tools for people quarantined at home.

#### CIO JOURNAL

### Pandemic to Jumpstart Spending on Data Tools at Manufacturers

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Being able to monitor production remotely during the pandemic has made the case for even more data capabilities.

## APPENDIX B

### Screen Shots of Glo-Bus Decision Screens (using Action-Capture decisions only)

#### ACTION-CAPTURE CAMERA DESIGN

Image Sensor Size	<input type="text" value="11mm"/>	diagonal	
LCD Display Screen	<input type="text" value="920k"/>	pixels	
Image Quality (maximum resolution)	<input type="text" value="2704x2028"/>	pix.	
Number of Photo Modes (video / still)	<input type="text" value="8 / 3"/>	modes	
Product Enhancements	<input type="text" value="\$ 8"/>	per camera	
Camera Housing	<input type="text" value="\$ 8"/>	per camera	
Editing/Sharing Capabilities	<input type="text" value="\$ 8"/>	per camera	
Included Accessories	<input type="text" value="\$ 10"/>	per camera	
Extra Performance Features	<input type="text" value="3"/>	features	
Number of AC Camera Models	<input type="text" value="3"/>	models	
Product R&D Expenditures (Y11 was \$20,000)	<input type="text" value="\$ 20000"/>	(\$000s)	
Cumulative R&D Expenditures (all years)	\$ 185,000 (\$000s)		

#### ACTION-CAPTURE CAMERA MARKETING

	North America	Europe-Africa	Asia-Pacific	Latin America
Average Wholesale Price to Retailers (\$/unit)	\$ <input type="text" value="225"/>	\$ <input type="text" value="225"/>	\$ <input type="text" value="225"/>	\$ <input type="text" value="225"/>
Buyer Appeal Variables Generated from Product Design Decisions — P/Q Rating No. of Models	4.7 ☆ 3 models	4.7 ☆ 3 models	4.7 ☆ 3 models	4.7 ☆ 3 models
Retailer Support Budget (\$000s) Projected Support Expenditures Per Unit Sold	\$ <input type="text" value="1710"/> \$5.32 per unit	\$ <input type="text" value="1440"/> \$5.46 per unit	\$ <input type="text" value="1110"/> \$4.39 per unit	\$ <input type="text" value="780"/> \$4.87 per unit
Advertising Budget (\$000s)	\$ <input type="text" value="2500"/>	\$ <input type="text" value="1400"/>	\$ <input type="text" value="1000"/>	\$ <input type="text" value="750"/>
Website Displays/Info (\$000s)	\$ <input type="text" value="1500"/>	\$ <input type="text" value="1200"/>	\$ <input type="text" value="900"/>	\$ <input type="text" value="600"/>
Sales Promotions (number of weeks   % discount)	<input type="text" value="1 wk"/>   <input type="text" value="10%"/>	<input type="text" value="1 wk"/>   <input type="text" value="10%"/>	<input type="text" value="1 wk"/>   <input type="text" value="10%"/>	<input type="text" value="1 wk"/>   <input type="text" value="10%"/>
Warranty Period (60 days, 90 days, 120 days, 180 days, 1 year)	<input type="text" value="60 days"/>	<input type="text" value="60 days"/>	<input type="text" value="60 days"/>	<input type="text" value="60 days"/>
Expected Claim Rate (%)   Repair Cost (\$000s)	6.8%   \$1,085	6.8%   \$890	6.8%   \$855	6.8%   \$540



## AC CAMERA WORKFORCE COMPENSATION

Compensation Decisions		Company (Year 12)	Ind. Avg. (last year)
Base Wage (per PAT member)	<input type="text" value="+1%"/> change	\$21,871	\$25,009
Assembly Quality Incentive	\$ <input type="text" value="2.40"/> per unit	1,737	3,278
Attendance Bonus	\$ <input type="text" value="800"/> per worker	800	1,008
Fringe Benefit Package	\$ <input type="text" value="2000"/> per worker	2,000	2,433
Total Compensation (\$ per worker per year)		\$26,408	\$31,728
Best Practices / Productivity Improvement Training (\$/PAT)		\$ <input type="text" value="1000"/>	
Projected PAT Productivity (AC Camera units per PAT per year)		2,970	

## AC CAMERA ASSEMBLY FACILITY

Workstation Spaces		Installed Workstations	
At the End of Year 11	300 spaces	At the End of Year 11	280 workstns
Expansion (new spaces)	<input type="text" value="0"/> \$400k ea.	Installed for Y12	<input type="text" value="0"/> \$125k ea.
Available for Year 12	300 spaces	Available for Year 12	280 workstns
Additional Workstations Needed to Avoid Overtime Assembly <input type="text" value="130"/>			
Assembly Capability (000s of units)	832.0 w/o OT	998.0 at maximum OT	
Projected Camera Demand (000s of units)	<b>1,217.2</b>		
Expected ACC Unit Shortfall (unsatisfied demand)	<b>-219.2</b> (000s of units)		

Unit Assembly and Labor Costs	Units (000s)	Labor Costs	
		\$000s	\$/unit
ACC Assembly — Regular-Time	832.0	29,727	35.73
Overtime	166.0	7,733	46.58
Training		281	0.28
<b>Total</b>	<b>998.0</b>	<b>37,741</b>	<b>37.82</b>

Robotics Upgrade for All ACC Workstations		Upgrade
(to reduce the number of persons per PAT from 4 to 3)		<input type="text" value="No Upgrade"/>
Cost Impact of Upgrade (\$000s)		\$000s
Depreciation (5% of \$0k capital cost of upgrade)		0
Labor (total savings in wages and incentive pay)		0
Maintenance (additional cost of \$9.0k per workstation)		0
Interest (if financed <input type="text" value="100% with a 10-Year Loan"/>		0
<b>Net Annual Cost Impact of Robotics Upgrade</b>		<b>0</b>

## CSRC INITIATIVES

Charitable Contributions	\$ <input type="text" value="0"/> or <input type="text" value="0.0%"/> of operating profit	Involves donations to registered charities and charitable causes. Treated on the Income Statement as "Other Expenses" (reduces pre-tax income).
"Green" Initiatives to Promote Environmental Sustainability	<input type="text" value="No"/>	Involves use of environmentally friendly components, recycled materials, and green shipping. Increases production cost of AC Cameras by \$2.00 and UAV Drones by \$5.00 per unit, shipping costs of AC Cameras by \$1.00 and UAV Drones by \$2.50 per unit, and annual administrative costs by \$300k.
Renewable Energy Program	\$ <input type="text" value="0"/>	Involves ongoing expenditures to incorporate renewable energy resources at the Taiwan assembly facilities. These expenditures are treated as capital investment and depreciated at 5% per year.
Improved Working Conditions	Cafeteria and On-Site Child Care Facilities for Plant Employees <input type="text" value="No"/>	Involves one-time capital investment of \$2.5 million and increased administrative costs of \$600k annually. Results in one-time productivity increases of 100 units/year for camera PATs and 50 units/year for drone PATs.
	Additional Safety Equipment and Improved Lighting / Ventilation <input type="text" value="No"/>	Involves one-time capital investment of \$3.0 million and increased administrative costs of \$500k annually. Results in one-time productivity increases of 100 units/year for camera PATs and 50 units/year for drone PATs.
Institution of a Supplier Code of Conduct and Compliance Monitoring of Suppliers	<input type="text" value="No"/>	Involves a dedicated effort to promote fair employment practices and safe working conditions at supplier factories (regarding excessive work hours, substandard wages, underage labor, exposure to toxic materials, and unsafe work practices). Entails added annual administrative costs of \$500k.

## FINANCE AND CASH FLOW

Sources of Additional Cash (\$000s)	1-Year Bank Loan (4.30% interest)	<input type="text" value="0"/>	Uses for Excess Cash (\$000s)	Early Repayment of L-T Loans (Balance Sheet Note 8)	<input type="text" value="None"/>
	5-Year Bank Loan (4.80% interest)	<input type="text" value="0"/>		Dividend (\$/share) Year 11 dividend was \$0.00	<input type="text" value="0.00"/>
	10-Year Bank Loan (5.30% interest)	<input type="text" value="0"/>		Stock Repurchase (000s of shares at \$18.47)	<input type="text" value="0"/>
	Stock Issue (000s of shares at \$18.47)	<input type="text" value="0"/>		Maximum share repurchase in Y12 = 3000k	
Maximum share issue in Y12 = 5000k					