

# A Comprehensive Guide to Simulation-Based Learning.

Business Simulations for Academic Institutions and  
Corporate Companies in South Africa.



## What is a Business Simulation?

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A business simulation is an experiential learning tool where participants learn by running a virtual business in an interactive, risk-free, and realistic environment.

Business simulations help practice and improve business skills, such as business acumen, financial and market analysis, operations, decision making, problem solving, teamwork, communication, leadership and more.

## What is Simulation-Based Learning?

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Simulation-based learning is a type of educational or training method that uses computer-based simulations to imitate real-world situations, allowing participants to practice and learn new skills, concepts, and processes in a safe and controlled environment. The goal of simulation-based learning is to provide hands-on experience, foster problem-solving skills, and enhance understanding of complex business systems and processes, without the risk or cost of making mistakes in the real world.

This form of training has been shown to lead to better learning outcomes and improved retention of information, as well as reduced risk and cost compared to traditional methods.



By utilizing the latest technology, all business simulations are built on a powerful, stable, and highly scalable online platform, making it easy-to-use and accessible for all participants and instructors on any internet enabled device.

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# The Benefits of Simulation-Based Learning.

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## For Academic Institutions

- ✓ Improve the employability of students.
- ✓ Improve cooperation between institutions (even across borders).
- ✓ Improve student-faculty and student-student interaction.
- ✓ Improve academic achievements (i.e. higher grades).
- ✓ Create a more enjoyable school curriculum.
- ✓ Help in making the school offering more versatile.
- ✓ Ability to better illustrate theoretical business concepts.
- ✓ Increase student engagement and enjoyment.
- ✓ Improve student knowledge retention, decision making and teamwork skills.
- ✓ Allow you to run all of your simulation-based courses online in any format.
- ✓ Give you a powerful tool to test the hands-on skills and strategic thinking of students.

## For Corporate Companies

- ✓ Ensure the competitiveness of your business on the long run.
- ✓ Improve the communication and teamwork between departments and colleagues.
- ✓ Help managers make better decisions by taking other departments into account.
- ✓ Help participants understand what decisions contribute to shareholder value.
- ✓ Help with talent acquisition and talent management.
- ✓ Help you train cross-functional management teams in a virtual environment.
- ✓ Improve your holistic understanding of your company's business activities.
- ✓ Increase participant engagement and enjoyment.
- ✓ Improve participant knowledge retention, decision making and teamwork skills.

# Understanding A Typical Business Simulation Game Flow.

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After the introduction, the participants familiarize themselves with the decision-making process via a practice round. The practice round results will not have any influence on the actual results. The instructor decides the number of actual decision-making rounds.

Each market consists of teams. The number of parallel markets is not limited, making it possible to utilize the simulation for any number of participants. All teams are starting from exactly the same position, with similar market shares and profits. Similarly, the teams will be faced by the same market conditions during the simulation.

It is notable that the teams compete against other teams in their own market, not against a computer. Each team's decisions influence the result of other teams and the market development overall.



# SUSTAINABILITY

The programmes include environmental, social, and governance decisions as part of the core business strategy. With fully integrated ESG decisions, participants can incorporate sustainable development goals into their strategy on the business simulations, while improving financial performance and delivering value for all stakeholders.

A key aspect of the environmental, social, and governance implementation is to highlight sustainability and corporate responsibility decisions as a fundamental part of the strategy and operations, not as a separate policy.



# The Educational Technologies Landscape.

Academic Institutions and Corporate Companies are increasingly pressured to prove that their efforts is improving overall knowledge retention rate, productivity and employability.

The rapidly evolving landscape of educational technology is drastically changing the way participants consume information, and it is imperative that the industry keep up with them, or risk being left behind. The modern participant is increasingly looking for ways to be engaged both outside and inside the learning environment, and combining that with their natural aptitude for the digital world, makes teaching them a difficult endeavor at times

The business simulations is used in various level of education and training:

Undergraduate Degrees	Graduate Degrees	Capstone Programs	EMBA	MBA
Executive MBA	Advanced Courses	Business Majors	Executive Training	Corporate Training

"Top international academic institutions succeed in engaging their participants and improve their overall performance through risk-free simulation-based learning"





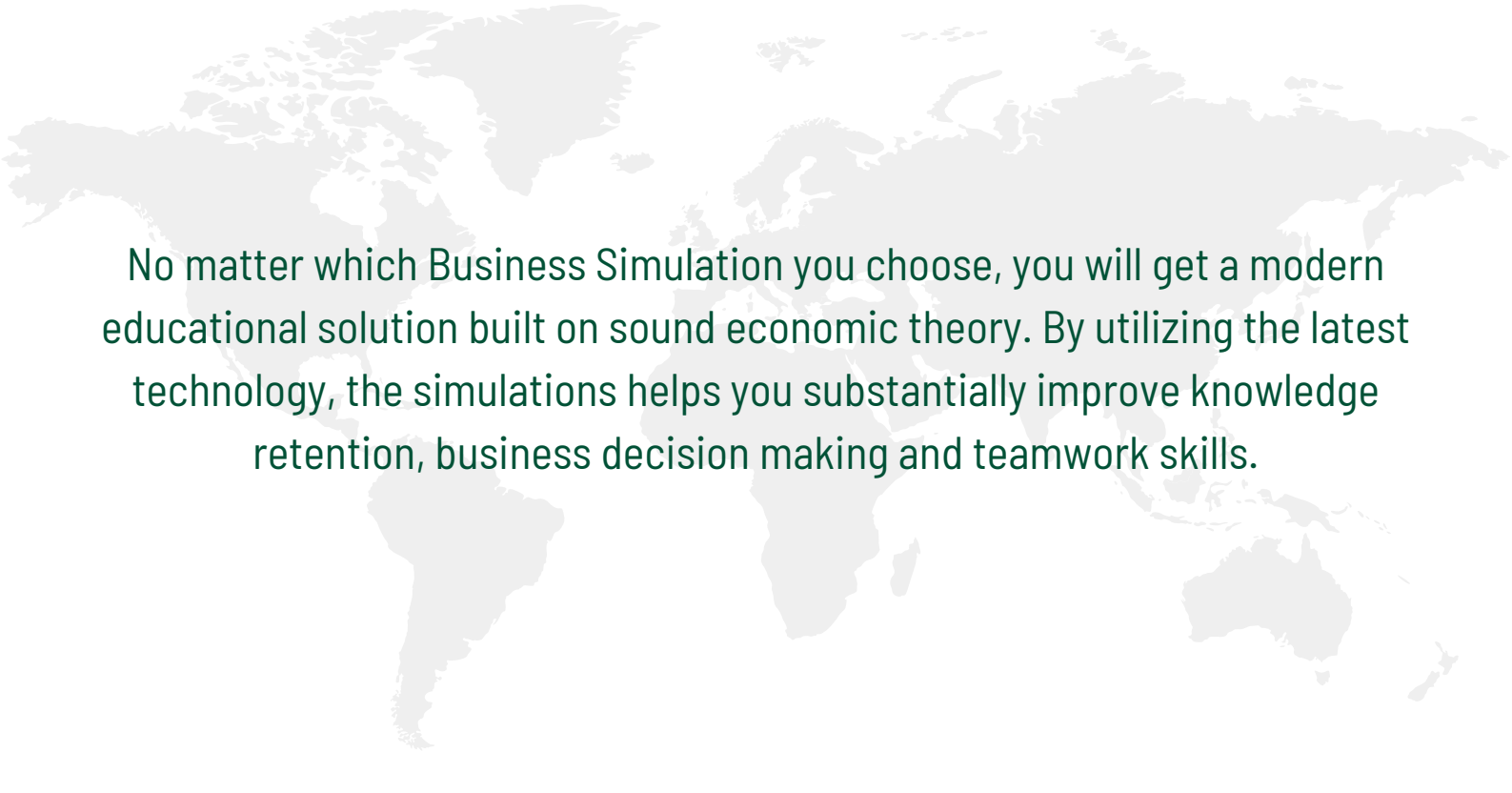
# Business Simulations Summary

Simulation	Participant Tasks	Learning Areas	Success Factors
<b>Strategy &amp; International Management</b>	Strategic management of a global technology company's road-maps, demand-supply network, sales in US, Asia and Europe.	Economics, finance, human resources, accounting, procurement, production, logistics, research and innovation, marketing.	Strategic planning, execution, demand-supply management, finance.
<b>Project Management</b>	The project team together is tasked with completing a large sub-project and the entire project organization must successfully complete multiple possibly interlocking projects each colored by some unique problem spots.	Disseminating information appropriately within the project team and the larger organization, taking into full consideration the unique needs of a real project team in place.	Completing tasks with the best quality, least time and cost within budgetary constraints.
<b>Sales and Marketing Management</b>	Management of a global smartphone company's strategic marketing in Europe and Asia.	Segmentation, positioning, distribution channel investments, advertising budget allocation, after sales services, pricing, sales forecasting, marketing research, competitor analysis, R&D and profitability.	Strategic planning, analytical marketing decisions, product portfolio management.
<b>General Management</b>	Sales and operations management of an international pharmaceutical company.	Marketing, production, logistics, and financial decision-making. In addition, it links the organization to the wider context of business world and stakeholders.	Operations planning, capacity utilisation, investments, demand forecasting.

Simulation	Participant Tasks	Learning Areas	Success Factors
<b>Bank and Financial Management</b>	The task for participating teams is to manage a bank with several front and back office operations in a single geographical market.	Retail banking, SME banking, corporate banking, investment services, investment products, personnel, systems, risk management, treasury.	Total shareholder return p.a. consolidates all key success factors into one measurable criterion that is used for team performance comparison.
<b>Small Service Management</b>	Management of a family hotel in a competitive market with seasonal variations.	Overall operation, financial performance, human resources management, capacity management, investments, service quality, pricing, marketing.	Operations planning, capacity utilisation, demand forecasting.
<b>Retail Store Management</b>	To manage procurement and inventory, pricing, advertising, promotion campaigns across different product categories.	How consumer preferences, competitor actions, pricing and profitability, interlinks between procurement, inventory levels, and cash flow management, utilization of permanent and temporary staff in seasonal variations, store layout and store remodeling impact to sales, and capital appraisal for new store locations.	The ability to best identify underlying trends, analyze competition, and successfully formulate a winning strategy.
<b>Electric Utilities Management</b>	The task for the teams is to manage the sales, production, risk management, and finance functions of a power utility.	Electricity sales, procurement, renewable energy investments, sustainable development policies, risk-management, financials, and their relationships with each other.	The success of the teams is measured by their ability to generate sustainable shareholder returns.



Simulation	Participant Tasks	Learning Areas	Success Factors
<b>Telecom Operator Management</b>	To manage mobile, broadband and entertainment services for residential customers; communications and IT services for corporate customers.	Channel management, human resource management, customer service management, network infrastructure investment decisions.	The ability to grow a profitable customer base over time.
<b>Hospitality Management</b>	The participants run their hotel and restaurant operations in competition with other teams.	Revenue management, sales promotion, menu engineering, housekeeping, staff management and procurement. Big picture understanding of the linkages between different functions and their impact on the bottom line.	Operating profit, net profit, return on assets, and cash flows. Within the hotel operations, revenue management and customer satisfaction are key.



No matter which Business Simulation you choose, you will get a modern educational solution built on sound economic theory. By utilizing the latest technology, the simulations helps you substantially improve knowledge retention, business decision making and teamwork skills.

# Strategy and International Management

## *Business Simulation*

The Strategy and International Business Simulation improves the learners' understanding and capabilities of running global business operations of a firm in a dynamic, competitive environment.

### **Focus**

Strategic management, international business, business policy.

### **Used In**

Strategy, international business, and capstone courses at advanced undergraduate and graduate levels. Executive MBA programs and in-house corporate trainings.

### **Case Scenario**

Participants manage a global technology company through technological and market evolution. They operate in three global regions with different customer preferences, growth rates, currencies, taxes, and tariffs. Four different technology generations evolve during the simulation rounds.

### **Participant Task**

Learners plan and implement global demand-supply strategy for three markets and two production areas, including in-house and contract manufacturing network. Research and development for new technologies and product features forms the backbone for their long-term strategy and product life-cycle management. They will manage international taxation through transfer pricing and control liquidity and capital structure. Optionally, they can also manage corporate social responsibility and human resources for research and development.

### **Key Learning Areas**

Technology-based product road maps and global market and production strategies. A range of concepts from various management-related disciplines: economic, political, financial, human resources, accounting, procurement, production, logistics, research and innovation, and marketing.

### **Key Success Factors**

Success is measured and compared by both operational and financial key indicators. The ultimate indicator in the simulation is the return to the shareholders, which consolidates all the key success factors into one measurable criterion that can be used to compare the performance of each team.

### **Expected Outcome**

Better understanding of the complexity of global business operations in a dynamic competitive environment. Comprehension of each of the management-related disciplines and the financial implications of the strategic and operational decisions. Invaluable experiences in teamwork and problem solving.

# Project Management

## *Business Simulation*

The team-based and interactive Project Management Business Simulation allows participants to experience the dynamics of managing a project that is part of a broader, multi-project program with interdependent projects.

### **Focus**

Project management, teamwork and leadership, effective collaboration and communication.

### **Used In**

Introductory and more advanced project management courses, interactive project management sessions, executive and project management training programs.

### **Case Scenario**

Software development project/program that consists of four interdependent projects.

### **Participant Task**

The role of each team member is to manage a project and the goal of the team is to complete a program that consists of multiple projects. Project managers who are in charge of their respective projects seek to complete their projects with the highest quality, least cost, and on time within the budgetary constraints. Each project has its own task requirements that need to be matched with the project team members' skill sets. Project managers decide about prioritization of project tasks, use of overtime hours, preparation for unexpected changes, outsourcing of tasks, and potential changes in project team composition. The simulation tracks the progression of the program and the individual projects.

### **Key Learning Areas**

This simulation was designed from the ground up on the philosophy that communication between people is the essence of all project management. While project management at large covers a multitude of functional disciplines, many of which are part of the simulation, the key learning area is the need to disseminate information appropriately within the program, taking into full consideration the unique needs of each project in place.

### **Key Success Factors**

The ultimate goal for the team is to complete the whole program and successful teams will demonstrate strong communication skills and skillful balance between individual and team goals. The success of the teams vitally depends on the project managers' ability to communicate appropriate action plans within the newly formed program.

### **Expected Outcome**

Better understanding of the critical element of communication in project work. Increased understanding of the interplay of collaborative and competitive elements in an environment that puts interpersonal skills to test. Insights into the systematic measurement of project goals and key metrics like time, cost, and quality. Appreciation of differences of opinion and variance in teamwork skills.



# Sales and Marketing Management

## *Business Simulation*

The Marketing Management Business Simulation develops the understanding and command of the whole marketing decision-making process.

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### **Case Scenario**

The marketing simulation consists of eight customer segments in two market areas and a maximum of six different smartphone products that can be offered to the markets simultaneously. In order to encourage unique strategy creation and execution, participants start their companies fresh without any operations history. Participants are provided with a decision making tool that helps them to try and practice with different scenarios as well as analyze the outcomes of their decisions and projections. In addition, the simulation generates a range of reports that will help the teams to analyze and benchmark their own performance against their competitors.

### **Participant Task**

A significant part of the decision making challenge is to actively manage the product portfolio by matching both qualitative and quantitative features of products with the selected target segments' preferences. Moreover, pricing, promotion and channel selection need to be set based on the segments' preferences. In addition, teams manage the after sales and research and development decisions.

### **Key Learning Areas**

The marketing simulation covers marketing topics including product life cycle management, segmentation, positioning, distribution channel investments, advertising budget allocation, after sales services, pricing, sales forecasting, marketing research, competitor analysis, research and development, and profitability.

### **Key Success Factors**

The essence is to mirror a fast developing smartphone market that is driven by short product life cycles and innovation; where constant attention to core competences, timely product development, segmentation, positioning, and marketing communications are the keys to success.

### **Expected Outcome**

As an outcome of the marketing strategy simulation game, participants will fully comprehend the different parts of the marketing decision making process, their relationship with each other, and their impact on the company's overall results. In addition, participants will gain invaluable experience in teamwork and problem solving.

# General Management

## *Business Simulation*

The General Management Business Simulation increases the participants awareness and capability of operating a company from a general management perspective in a competitive environment.

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### **Focus**

Business management, planning and forecasting, demand and cost management, investment appraisal, competition, financial budgeting and planning.

### **Used In**

Business skills courses for non-business majors, introductory courses for business majors, business acumen courses at corporate in-house programs.

### **Case Scenario**

Participants manage a manufacturing company with international operations. There are up to three market areas and two production areas available.

### **Participant Task**

Teams will develop and execute strategies for their simulated company while taking into consideration the customer behaviour, cost structures, and currency fluctuations in the different markets. Decisions include promotion, pricing, and quality control across products and customer segments, production location cost advantages, investment appraisal, capital vs. labour assessment, financing decisions, demand estimations and budgeting.

### **Key Learning Areas**

The simulation integrates a range of concepts from various management related disciplines, including marketing, production, logistics, and financial decision-making. In addition, it links the organization to the wider context of business world and stakeholders.

### **Key Success Factors**

Successful strategy creation and implementation in competitive environment. Accurate sales forecasting and planning. Design and execution of cost-effective production and logistics operations in cross- border setting. Precise financial planning, analytical approach to decision-making, and good teamwork. Success is measured by both operational and financial key indicators, including capacity utilization rates, market shares, net profit, return on capital, and earnings per share.

### **Expected Outcome**

As a result, participants will improve their understanding of operating a company from a general management perspective and develop market- and value- driven approach to decision making. They will improve their capability to interpret and forecast market situations and translate them into goal-oriented decisions. It also enhances fact-based analytical decision making by linking decisions to cash flows and bottom line performance.

# Bank and Financial Management

## *Business Simulation*

The goal of the Bank, Risk and Financial simulation is to facilitate understanding of the front and back office operations of a bank and risk industry, their interaction in a competitive environment, to help cultivate holistic and fact-based management culture, develop analytical skills and create awareness about the current operating environment.

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### **Used In**

Training programs within the financial industry for both smaller and larger institutions and advanced courses at educational institutions. The banking simulation game offers a wealth of customization options for widest array of use cases and optimal implementation.

### **Participant Task**

The task for participating teams is to manage a bank with several front and back office operations in a single geographical market. In the role of a bank manager, teams will be responsible for consumer and business clients, lending and borrowing, front office and back office, and customers with deposits, mortgages and other credit products and investments. They'll have personnel to manage, IT systems to maintain and develop, risk metrics to keep in check, regulators to report to and capital markets to raise financing from, provided that they are pleased with the way the bank is managed.

### **Key Learning Areas**

Pricing of credit and deposit products. Balancing risks and the growth of the balance sheet. The division of bank funding sources into core deposits and managed liabilities. Understanding the bank income statement and balance sheet. The interaction between central bank and commercial banks. Bank specific solvency and liquidity measures and regulation according to international standards. Bank specific terminology and results presentation including many unique financial ratios. Uniqueness of money as the bank's core product. Profitability of different customer segments and products. Understanding basic banking products and services and how they relate to each other.

### **Key Success Factors**

Success is measured and bench marked by both operational and financial key indicators including assets under management, deposit and credit product growth, bank image, risk metrics, credit rating, net interest margin, cost / income ratio, credit impairments, net profit margin, return on assets, return on equity etc. The ultimate indicator in the bank management simulation game is the total shareholder return p.a., which consolidates all the key success factors into one measurable criterion that can be used to compare the performance of each team



# Small Service Management

## *Business Simulation*

The Small Service Business Simulation gives participants practical experience in running a business in a competitive environment by integrating HR management, capacity management, sales and marketing.

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### **Focus**

Entrepreneurship, services management, business fundamentals, SME management.

### **Used In**

Entrepreneurship and services management courses at different levels, college preparedness courses, undergraduate courses focused on business fundamentals, college-level business courses. In-house corporate trainings.

### **Case Scenario**

The simulation case encompasses the essential elements of service business management. Participants run a small family hotel in a seasonal environment with one established market and an option to expand to a new market with different demographics.

### **Participant Task**

During the rounds, teams manage their companies' staffing with both permanent and temporary resources, direct sales, sales channels, investments, service quality, pricing, and marketing. They operate in competitive markets with seasonal variations in demand and economic conditions. Strategic decisions about expanding operations to a new market can also be included.

### **Key Learning Areas**

Management of the operating, market, and financial performance. Emphasis on human resource management, capacity management, investments, service quality, pricing, and marketing as the key decision making areas.

### **Key Success Factors**

Teams must develop and implement a consistent business plan that addresses the seasonal variations in demand and utilizes the principles of management effectively. In addition, well planned human resource management is highly important. Success is measured by both operational and financial key indicators, including capacity utilization rates, customer and employee satisfaction, market shares, profit per employee, net profit, return on capital, and earnings per share

### **Expected Outcome**

To help the participants to develop a holistic view of business operations including marketing, sales, human resources, capacity management, investments, and service quality. To develop the understanding and command of business fundamentals, market driven decision-making practices and financial implications of the various operational and marketing decisions. In addition, participants will gain invaluable experience in teamwork and problem solving

# Retail Store Management

## *Business Simulation*

The Retail Store Management Business Simulation puts the participants in charge of a store or a franchise with multiple stores in a seasonal environment.

### **Focus**

Retail industry, store management, retail marketing, consumer behavior.

### **Used In**

Various marketing courses, retail management courses, franchise operations courses.

### **Case Scenario**

The default case is based on running a single convenience store or a multi-store franchise in different demographic areas. Each simulation round corresponds to one quarter of a year and seasonality is an important decision-making factor.

### **Participant Task**

In competition with other teams, participants manage procurement and inventory, pricing, advertising, and promotion campaigns across different product categories. In addition, the simulation includes modules for operational and strategic decisions such as store layout, operating hours, staffing, loyalty programs, store remodeling, new store locations, and cash flow management

### **Key Learning Areas**

During the rounds participants experience how consumer preferences and competitor actions influence pricing and profitability, interlinks between procurement, inventory levels, and cash flow management, utilization of permanent and temporary staff in seasonal variations, store layout and store remodeling impact to sales, and capital appraisal for new store locations.

### **Key Success Factors**

The essence of the simulation is to mirror the operations of a typical retail store or franchise, tie together multiple business concepts and allow for a successful execution of alternative strategies. The simulation is designed to reward those who can best identify underlying trends, analyze competition, and successfully formulate a winning strategy. Success of the teams is presented with multiple industry-specific indicators, customer reports, operational reports, and financial reports.

### **Expected Outcome**

Participants develop capabilities in formulating, implementing, and adapting business strategies and decisions in a competitive environment. In addition, they will enhance their fact-based decision-making skills and improve their financial knowledge through linking operational decisions to cash flows and bottom line performance. The simulation exercise also gives practical experiences in team-work and problem solving, and excites competitive spirits in a dynamically evolving marketplace.

# Electric Utilities Management

## *Business Simulation*

The Electric Utilities Management Simulation game combines the dynamics of power markets, production, and risk management. It also includes decisions and policies regarding sustainable development.

### Focus

Energy industry, strategic management, risk management, regulation, power utilities, commodities.

### Used In

Integrative courses at electrical, energy and commodities related utility management programs in business and engineering schools, executive MBA programs and in-house programs.

### Case Scenario

Teams manage a power utility that has its own production with coal-fired, gas-fired, and eolic power plants and a solid customer base consisting of both industrial and residential customers. The company uses forward contracts for hedging against market price fluctuations and it operates in markets where greenhouse gas regulations and carbon emissions trading take place.

### Participant Task

The task for the teams is to manage the sales, production, risk management, and finance functions of a power utility. Teams make decisions regarding pricing, marketing, plant investments and divestments, capacity utilization and operational improvements, renewable energy, risk management policy, funding, and profit redistribution.

### Key Learning Areas

The tasks familiarizes participants with the whole decision-making environment for a power utility; including electricity sales, procurement, renewable energy investments, sustainable development policies, risk-management, financials, and their relationship with each other. During the rounds, participants experience how variations in the electricity spot price impact their profitability, how they should take those price variations into account when pricing to their own customers, what types of power plants to use under different conditions, what kind of risk-management policies they should apply, how different regulatory aspects influence the company's operations, and how the changes in customer preferences and shifts in demand should be taken into account

### Key Success Factors

The success of the teams is measured by their ability to generate sustainable shareholder returns. The returns are dependent on how teams are able to incorporate the impact of regulatory policies in their investment decisions, how they address the preferences of different customer segments, and how successful they are in their risk management and financial decisions.

### Expected Outcome

Participants develop capabilities in formulating, implementing, and adapting business strategies in a dynamic competitive environment. In addition, they will enhance their fact based decision-making skills and improve their financial knowledge through linking operational decisions to cash flows and bottom line performance. The electric simulation exercise also gives practical experiences in team-work and problem solving and excites competitive spirits in a dynamically evolving marketplace.



# Telecom Operator Management

## *Business Simulation*

The Telecom Operator Management Business Simulation enable teams to manage mobile, broadband and entertainment services for residential customers, communications, IT services for corporate customers, decisions regarding network infrastructure development and finance.

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### **Focus**

Telecom industry, business skills for telecom, strategic management, finance.

### **Case Scenario**

Teams manage a telecom operator that provides telecom and entertainment services for residential customers and telecom and IT services for corporate customers. The telecom company is currently placed in a situation where the expansion of the 4G network is a key decision. In addition, teams need to carry forward the company's recent entry to the entertainment services.

### **Participant Task**

Pricing, promotion, channel management, entertainment service strategy, human resources, network infrastructure development, and finance are among the decision areas that participants must consider. In addition, teams will make decisions about various different events that influence the success of their companies for the whole duration of the telecom simulation.

### **Key Learning Areas**

The telecom business simulation game helps participants to comprehend relationships between different telecom operator functions and develops their telecom related business acumen. The telecom simulator improves participants' decision-making skills familiarizing them with the whole decision-making environment for a telecommunications operator, including mobile, fixed broadband, entertainment, IT services, channel management, network infrastructure development, and finance. During the rounds, participants must plan how they prepare for shifting consumer preferences and new network technologies. They experience how variations in competitive intensity influences their profitability, and how they should nurture shareholder returns even with zero or negative growth.

### **Key Success Factors**

Teams' success is measured by their abilities to generate shareholder returns. Returns are dependent on how teams are able to run the operations, how well they manage to maneuver the company through changes in the external environment and competitive forces, and how successful they are in their decisions regarding capital structure and profit redistribution.

### **Expected Outcome**

Participants develop capabilities in formulating, implementing, and adapting business strategies in a dynamic competitive environment. In addition, they will enhance their fact based decision-making skills and improve their financial knowledge through linking operational decisions to cash flows and bottom line performance. The telecom simulation platform also gives practical experiences in team-work and problem solving and excites competitive spirits in a dynamically evolving marketplace.

# Hospitality Management

## *Business Simulation*

Hospitality is an interactive and fun learning environment that improves the participants' business competencies and employability in the hospitality industry setting.

### **Focus**

Hotel and Restaurant Management

### **Used In**

Business and management courses at undergraduate and graduate levels in hospitality and tourism programs. Corporate in- house programs.

### **Case Scenario**

Hotel with 140 rooms and attached restaurant. Each decision-making round represents two weeks of operations for the simulated company.

### **Participant Task**

The participants run their hotel and restaurant operations in competition with other teams. Decisions include revenue management, sales promotion, food & beverage, housekeeping, staff management and procurement. They can practice with different scenarios as well as analyze the outcomes of their decisions and benchmark against the competitors.

### **Key Learning Areas**

Revenue management, sales promotion, menu engineering, housekeeping, staff management and procurement. Holistic understanding of the linkages between different functions and their impact on the bottom line.

### **Key Success Factors**

The success of the teams is measured with a number of different financial ratios, including operating profit, net profit, return on assets, and cash flows. Revenue management and customer satisfaction are key success factors within the hotel operations. Success factors for the restaurant operations include menu engineering, staff management and overall customer experience. In addition, the simulation contains all relevant industry specific ratios. Financial results are reported according to the Uniform System of Accounts for Restaurants and for the Lodging Industry.

### **Expected Outcome**

The simulation game develops the participants' capabilities in identifying, analyzing, and acting on the key operational & environmental variables that influence hotel and restaurant operations in competitive setting. Furthermore, the simulation enhances fact based analytical decision making and illuminates the financial implications of operational decisions by linking the decisions to cash flows and bottom line performance. Finally, this dynamic hospitality business simulation excites competitive spirits among participants and creates practical experience in teamwork and problem solving.

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## Website

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