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## COMPETING AGAINST HISTORICAL LINKS TEAMS

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*“Those who cannot remember the past are condemned to repeat it.” - George Santayana*

In standard LINKS usage, an instructor’s class is divided into teams (“firms” in LINKS) that compete against one another within a LINKS industry. This is traditional direct competition among current-student teams in an instructor’s current course. There are no computer controlled firms in LINKS.

### LINKS Architecture

Instructors can include historical LINKS firms as competitors in a current LINKS event.

Competing against historical firms involves a re-play of a pre-existing (historical) LINKS industry with the same setup, market conditions, and sequencing of within-event instructor-optional switches. In a LINKS re-play, some firms are managed by current-student teams who compete against the historical decisions of other firms within the re-played LINKS industry.

This LINKS innovation will be especially interesting to instructors with smaller classes whose only other viable alternatives would seem to be:

- **Use an inert firm.** An inert benchmark competitor firm never changes any decisions from the initial ones set by the LINKS software at industry initialization. An inert firm is not computer controlled because no pre-programmed decision logic and “what-if” decision rules exist within LINKS to change decisions in a purposeful, competitively context-sensitive, goal-seeking fashion. However, an inert firm still has relevance and potential merit as a benchmark competitor in a LINKS industry: what happens to a firm that never changes

any decisions throughout a LINKS event? And, in particular, what conclusions can be drawn about a current-student firm that underperforms an inert benchmark competitor firm? Unflattering conclusions, to be sure!

- **Use more smaller-sized teams to provide meaningful competition in a LINKS industry.** However, teams consisting of “about” four students are generally recommended for the LINKS simulations. Smaller-sized teams may miss the richness and associated inherent learning opportunities of within-team discussions in larger-sized teams.
- **Join forces with another instructor using the same LINKS simulation variant with a similar event schedule in a cross-institution LINKS industry.**

In a re-play of a pre-existing (historical) LINKS industry, some firms are composed of current students in an instructor’s course while other firms (and their decision inputs) are drawn from the historical LINKS archives. Instructors can freely mix-and-match current-student teams and historical competitors within a re-play of a pre-existing (historical) LINKS industry. By assigning current-student teams to manage lower-performing historical firms in a re-play, better-performing historical teams provide meaningful and even challenging competition for current-student teams.

Since the current and historical firms are competing in the same LINKS marketplace, they both have to (for current firms) or had to (for historical firms) respond to common underlying market forces such as cost structure, market drivers, and market growth patterns.

Thus, such historical firms provide meaningful competition for current-student teams.

### **Game Run Logistics**

Logistically, LINKS game runs with historical competitors use the decision inputs of the current-student teams (as submitted in the usual fashion via the LINKS Simulations website) along with the decision inputs of the historical firms drawn from the industry's historical archives. This is all managed within the LINKS software once appropriate "pointers" are activated to identify the historical firms whose decision inputs are drawn from the historical industry's archives.

For such a re-play to be viable, the complete history of the industry must be accessible so that historical competitors' decisions may be used throughout the current LINKS event. Since we archive all LINKS industries to backup storage at the conclusion of each LINKS event, historical LINKS industries are accessible for re-plays.

### **Practical Considerations**

In selecting a LINKS industry to re-play, there are some relevant considerations to note.

- A relatively "recent" historical industry is required so that the underlying data file structure is consistent with the current LINKS software. With 250+ new LINKS industries annually across the LINKS Simulations variants, this is normally not a major issue.
- A re-play requires that the instructor's current LINKS event follows the same event structure (parameter file, market conditions, and sequencing of instructor-optional switch settings) as in the re-played historical industry. For long-time LINKS instructors, this is normally not a problem since instructors tend to follow similar LINKS industry event designs through time.

Instructors should presumably be "truthful" with their current students when describing the nature of the competitors in a LINKS event based on the re-play of a historical LINKS

industry. Current students can obviously observe the number of students in their class and discrepancies between visual counts of current class size and the number of LINKS firms in their industry will be obvious to all involved.

### **For Further Conversation**

Instructors interested in exploring the option of a LINKS event with their current-student teams competing against historical LINKS teams are invited to contact Randy Chapman, the LINKS author (Chapman@LINKS-simulations.com) for conversation.

# New Forecasting FAQs

## Forecasting Sales For a Double-Run

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*“How should we forecast sales for our last two rounds which will be a LINKS double-run?”*

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*Forecast for the next round only, and that forecast will automatically carry-over unchanged into the second round of the double-run.*

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## Forecasting Sales in a New Market Region

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*“How do we forecast sales volume in a new market region?”*

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*It’s obviously a major challenge to forecast initial sales volume in a new region. But, even more importantly, there’s no a-priori knowledge about what product/service customers prefer in a new region.*

*The largest uncertainty about a new region is customers’ propensity to consume/purchase products/services. Even if customer demographics (numbers of potential customers) and economics (purchasing power) are comparable to pre-existing regions, new-region customers’ interest (propensity to consume/purchase) in the product/service category set top boxes could be higher or lower than in existing regions.*

*One approach is to wait and don’t enter a new region immediately. Perform relevant research, especially about configuration/design preferences of customers in a new region. And, continue to concentrate on existing regions. This delayed-entry strategy also allows initial demand for other firms’ products/services launched into the new region to be revealed (again, by ordering appropriate research students for the new region).*

*Just plunging into a new region has lots of risks, but perhaps doing so with one product/service is viable ... with a modest launch effort (including modest commitment of marketing support spending) ... just to ‘test the waters.’*



## LINKS Train-The-Trainer Seminars

June 6-10, 2016 and August 15-19, 2016

### LINKS Simulations Immersion Experience

### Five Teleconferences and a Four-Round LINKS Simulation Event

Registration is available for the next five-day, intensive-mode Train-The-Trainer distance-learning seminars for the LINKS simulations. Randy Chapman, the LINKS author, leads these distance-learning events for academic faculty interested in learning more about teaching with LINKS. These intensive-mode seminar formats includes 2-3 hours of work per day during each of the five days of the distance-learning seminars.

LINKS Train-The-Trainer Seminars are offered for the enterprise management, marketing, services, and supply chain management LINKS variants.

Current LINKS instructors are invited to pass along this announcement to faculty colleagues and

advanced doctoral students who might be interested in learning more about teaching with LINKS.

Experienced LINKS instructors sometimes participate in a LINKS Train-The-Trainer Seminar to refresh their memories of LINKS details just prior to teaching with LINKS or to explore another LINKS simulation variant for a future teaching activity. Such experienced LINKS instructors may elect just to participate in the TTT's four-round simulation event, ignoring the public teleconferences included in the LINKS TTT program. (PowerPoint decks are available to all LINKS TTT participants before each teleconference, so such experienced LINKS instructors may freely choose to participate in all, some, or none of the teleconferences as per their availability and interest.)

# Big Data in LINKS

At the instructor's option, Research Study #36 ("Market Database") may be included in any LINKS event with any LINKS Simulations variant to provide "big data" analysis possibilities in the LINKS environment.

This "Market Database" research study generates a market database (an Excel spreadsheet) for report generation, statistical analysis, and tracking/charting of LINKS industry market activities. No statistical analysis is conducted by executing this research study; subsequent analysis of this "big data" is for a LINKS team to undertake.

No new data are provided in this market database that aren't available via other LINKS research studies. This research study reduces labor-intensive activities related to manually transferring data from multiple LINKS research study reports into spreadsheet or database management software for subsequent analysis.



Research Study #36 is likely to be of most interest to instructors teaching advanced electives with larger LINKS Simulations variants, such as:

- xLINKS Enterprise Management Simulation [Extreme Edition]
- LINKS Marketing Research Simulation
- LINKS Marketing Strategy Simulation
- xLINKS Marketing Strategy Simulation [Extreme Edition]
- LINKS Services Management Simulation
- xLINKS Services Management Simulation [Extreme Edition]

Contact LINKS Simulations ([LINKS@LINKS-simulations.com](mailto:LINKS@LINKS-simulations.com)) to request a complete description of Research Study #36 ("Market Database").

# Forecaster Simulation @ 2,600

The Forecaster Simulation is an engaging, interactive 1-2 hour outside-of-class learning-by-doing tutorial that complements LINKS simulation usage.

- The 5 forecasting problems in the Forecaster Simulation are relevant to a wide range of introductory and elective business strategy, marketing, operations management, services, and supply chain management courses.
- The Forecaster Simulation includes within-simulation debriefing notes for each forecasting problem, accessible after completing each of the forecasting problems.
- Individuals or small teams can work on the Forecaster Simulation, with 2-person teams recommended for teaming's incremental learning.

Access the Forecaster Simulation via links on the main LINKS Simulations webpage and on each of the specific sub-webpages for LINKS simulations. A link also exists in the variant-specific sub-webpages in the Instructor Resources with a related link to the associated instructor notes for the Forecaster Simulation. The Forecaster Simulation direct URL is:

<http://www.LINKS-simulations.com/Forecaster/Introduction.php>

The Forecaster Simulation is a no-cost value-added offering of LINKS Simulations, but a passcode (e-mailed upon request) is required. A passcode may be requested within the Forecaster Simulation webpage.



**LINKS simulations**  
Since 1999

## Forecaster Simulation

Using the data provided within the 5 problems in the Forecaster Simulation, you're asked to assume the role of a forecaster creating a total of 14 sales volume forecasts. These 5 forecasting problems span a range of industry settings and a variety of situations and contexts.

**Your goal is to develop accurate forecasts.**

Forecasting accuracy is measured by comparing your forecasts to the actual outcomes that are known to have occurred (revealed only after you commit to specific forecasts).

After completing the Forecaster Simulation, you should have an improved understanding of the challenges and issues associated with developing useful and accurate forecasts in a variety of business contexts.

**Display Forecaster Overview Notes**

**A passcode is required to access the Forecaster Simulation. Passcodes are provided on request via e-mail sent to your e-mail address.**

*Access* Forecaster Simulation

  
Input Forecaster Simulation Passcode

*Request a Passcode for* Forecaster Simulation

  
Input E-Mail Address

Forecaster Simulation™ is a trademark of Randall G Chapman. All rights reserved.

And, since its creation/introduction in August/2012, more than 2,600 passcodes have been requested for the Forecaster Simulation!

# Reminders

**LINKS Passcode Retrieval:** LINKS passcode retrieval for a LINKS participant (student or instructor) is possible via the “Retrieve LINKS Passcode” link on the main LINKS webpage (<http://www.LINKS-simulations.com>). Executing the “Retrieve LINKS Passcode” operation e-mails the firm’s passcode to the participant’s official e-mail address as recorded in the LINKS Simulation Database.

**Student Payment Timing:** Student payment with a personal credit card is via the “Pay For LINKS” link on the LINKS webpage.

The published LINKS price (the discounted price) is in effect until the first round of LINKS is complete. Then, the price is increased 25%. This means that we can initialize a LINKS event (and advance LINKS through to its normal starting point) and students can continue to pay at the discounted price until the first scheduled round.

It is not necessary for your students to pay before LINKS begins to have access to the discounted LINKS price. Students must only pay before the first official game run on your game-run schedule to receive the discounted price. Thus, student payments can occur simultaneously with the beginning of a LINKS simulation event. As a practical matter, a final warning/reminder is e-mailed to those students who haven’t paid by the first game run, before implementing the non-discounted price.

**E-Mail Address Management:** Using their LINKS firm’s passcode, LINKS students may change their official LINKS e-mail address via the “E-Mail Address Management” button in the LINKS Simulation Database. Confirmations of e-mail address changes are e-mailed to the old and new e-mail addresses.

**LINKS Instructor Resources:** Instructors access LINKS Instructor Resources via the LINKS webpage. Contact Randy Chapman ([Chapman@LINKS-simulations.com](mailto:Chapman@LINKS-simulations.com)), the LINKS author, to obtain the username and passcode.



The LINKS Newsletter is a bi-monthly newsletter for current and prospective LINKS instructors and for LINKS friends. Please e-mail comments, suggestions, and other contributions (e.g., LINKS teaching tips) to [CWinkler@LINKS-simulations.com](mailto:CWinkler@LINKS-simulations.com)



Editor: Cyndy Winkler

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