SKILLSTACK SUITE

Statistics for Business & Decision Making — Video Scripts

Record-ready scripts for all twelve modules: hook, teaching beats, on-screen demo, close.

How to use this script pack

One script per module, written to be read aloud. Each has a hook, the teaching beats in order, the on-screen demo, and a close. Timings are targets, not rules — a tight 7-minute lesson beats a padded 12. Record audio first and re-record any beat you fumble rather than editing mid-sentence.

Production standard

- Spreadsheet at large zoom; formulas visible in the bar.
- Show the wrong version before the right one every time.
- Use one dataset across all twelve modules so comparisons carry.
- Say p-value interpretations slowly and precisely — this is where people mislearn.
- Add captions and correct statistical terms manually.
- Record the hook last.

Module 1 — What the question really is (8–12 min)

Hook (0:00–0:20). “"Is marketing working?" is not a question you can answer. Let us fix that first.”

Teaching beats

- Write the decision the answer will inform.
- Name the metric and the exact time window.
- Name the comparison — against what?
- Decide in advance what result would change the decision.

On screen. Take three vague questions and rewrite each live into a measurable form.

Close. “Rewrite one real business question as a measurable one, with the decision attached.”

Module 2 — Describing data (8–12 min)

Hook (0:00–0:20). “The average customer probably does not exist. Here is why that matters.”

Teaching beats

- Plot the distribution before quoting any summary.
- Report the median for skewed data, the mean for symmetric.
- Always quote a spread alongside a centre.
- Note the outliers rather than silently removing them.

On screen. Plot a skewed revenue distribution; mark mean and median on it.

Close. “Summarise a real dataset and state where the average misleads.”

Module 3 — Visual honesty (8–12 min)

Hook (0:00–0:20). “Most misleading charts are not dishonest. They are careless — and that is worse, because nobody catches them.”

Teaching beats

- Check the y-axis baseline first, every time.
- Be suspicious of any dual-axis chart.
- Match chart type to question type.
- Check whether the time window was chosen to flatter.

On screen. Take one real chart and un-truncate the axis on screen.

Close. “Find a published chart and list its distortions specifically.”

Module 4 — Variation (8–12 min)

Hook (0:00–0:20). “Every process varies. Reacting to normal variation is why some teams change direction every month.”

Teaching beats

- Plot the metric over many periods, not two.
- Establish the normal range of variation.
- React only to points outside that range.
- Look for sustained runs, not single moves.

On screen. Plot a metric over 24 periods; draw the normal range band.

Close. “Plot one metric over 12+ periods and mark the normal range.”

Module 5 — Sampling (8–12 min)

Hook (0:00–0:20). “Your data is a sample of something, even when it feels like everything.”

Teaching beats

- Ask who or what is missing from this data.
- Ask how collection could systematically skew it.
- State the population you are generalising to.
- Decide whether the bias matters for this specific decision.

On screen. Show a survey response set next to the population it came from.

Close. “Write down the sampling bias in a dataset you already use.”

Module 6 — Uncertainty (8–12 min)

Hook (0:00–0:20). “A single number implies a precision you almost certainly do not have.”

Teaching beats

- Calculate the interval, not just the estimate.
- Report the range and the confidence level together.
- Note the assumptions the interval depends on.
- If the interval spans the decision threshold, you do not have an answer yet.

On screen. Same estimate shown as a point and as an interval; discuss the different decisions.

Close. “Put an interval around one number you currently report as exact.”

Module 7 — Comparing groups (8–12 min)

Hook (0:00–0:20). “Nearly everyone gets p-values backwards, including people who use them weekly.”

Teaching beats

- State the comparison before looking at the data.
- Choose the test that matches your data type.
- Interpret the p-value as evidence against chance, nothing more.
- Never run tests repeatedly until one comes out significant.

On screen. Run a comparison test in a spreadsheet, then say the p-value out loud correctly.

Close. “Run a comparison test on two real groups and interpret it in plain language.”

Module 8 — Effect size (8–12 min)

Hook (0:00–0:20). “Statistically significant and worth doing are completely different questions.”

Teaching beats

- Calculate the effect size, not just the p-value.
- Convert it into money, time or customers.
- Compare that against the cost of acting.
- Report both together, always.

On screen. Show a significant result with a trivial effect, converted into money.

Close. “Calculate the effect size and state whether it justifies acting.”

Module 9 — Relationships (8–12 min)

Hook (0:00–0:20). “A surprisingly strong correlation in business data usually has a third variable behind it.”

Teaching beats

- Plot the relationship before calculating anything.
- Check for a third variable that could drive both.
- Treat regression coefficients as associations, not effects.
- Watch for a relationship that only exists in one subgroup.

On screen. Scatter plot with a confounder revealed by colouring a third variable.

Close. “Find a correlation in your data and name a plausible confounder.”

Module 10 — Causation (8–12 min)

Hook (0:00–0:20). “Before-and-after with no control group is not evidence of cause. It is a story.”

Teaching beats

- Ask whether anything was randomised.

- If not, ask what the comparison group is and why it is credible.
- Check the timing — did the cause precede the effect?
- Default to "associated with" unless you ran an experiment.

On screen. Before/after chart, then add a control group and watch the story change.

Close. “Rewrite one causal claim in your reporting as associational.”

Module 11 — Experiments (8–12 min)

Hook (0:00–0:20). “A test you can stop whenever you like is not a test.”

Teaching beats

- Fix the primary metric before launching.
- Calculate the sample size needed for the effect you care about.
- Fix the duration and do not stop early on a good result.
- Write the decision rule before you look at anything.

On screen. Sample size calculator on screen; then show the peeking problem.

Close. “Design an A/B test for a real decision — fix all four parameters before launch.”

Module 12 — Communicating results (8–12 min)

Hook (0:00–0:20). “Stripping the caveats makes the recommendation land harder — right up until someone questions it.”

Teaching beats

- Lead with the decision-relevant answer.
- Attach the uncertainty range to the headline number.
- Name the single biggest assumption.
- State what evidence would change the conclusion.

On screen. Rewrite a stripped-down finding to include the range and assumptions.

Close. “Present one finding with the range and assumptions intact.”