THE COURSE COMPANION · ONLINE COURSE · MY360

Intelligent Foresighting

See it coming — before your competitors do:
the Shell tradition, the five-step method, and the whole journey to a funded project.

Magnus Penker
Founder & CEO, Innovation360

Based on the Shell scenario tradition, the IMGB five-step method, ISO 56006, and Innovation by Design (Penker & Purcell, 2024)
Copyright Innovation 360, 2026 · Intelligent Foresighting™ · my360.global

BEFORE YOU BEGIN

The One-Page Version

If you read nothing else, read this page — then go build your radar in my360.global.

Surprise is a method failure, not a data failure. In 1972 Shell and everyone else had the same data; only Shell had rehearsed its leadership on a possible oil shock, and when October 1973 arrived, Shell moved while others froze. Kodak held its own digital evidence for decades and filed it. The difference was never information — it was a discipline for turning information into readiness. Our InnoSurvey data, from more than 10,000 assessed organizations across 105 countries, shows "Exploiting Insights" is the weakest-scoring ISO 56002 principle in the world: everyone expects the wave; few have a radar.

The discipline — compact enough for one sitting — is five certified steps — **Collect · Categorize · Stretch · Combine · Develop** — run as three moves: **SCAN** the world through seven lenses (PESTLED) and sort every driver by Important × Certain; **SHAPE** the two uncertainties you cannot resolve into axes, cross them into four named, internally consistent futures — each running on one main loop plus its causal loops (the engine that makes a world internally consistent) — and stress-test them; **STEER** by extracting what recurs in all four (common needs — fund now), wiring an early-warning dashboard (what · source · cadence), and writing triggers as "we act if …" — never "we act on [date]". A scenario is a hypothesis, never a prediction. The scenarios were never the product; decisions are.

Then the journey continues: initiatives become campaigns, campaigns become clustered concepts and killable XYZ hypotheses, hypotheses meet capped experiments, and gates say go, investigate further, or no-go — until a project worth backing is funded. The whole chain is grounded in ISO 56006 (strategic intelligence) and runs in the tools included with this course.

THE COURSE IN NUMBERS

- 3 chapters · 9 sub-chapters (only the sub-chapters are recorded) · 9 quizzes
- 45 minutes hands-on in the tools, on your own organization
- 3 months of PESTLED360 & Scenarios360 included · optional verified certificate
- Companion (this book) + Workbook (3 exercises) + the running cases: ClearAir and facility management

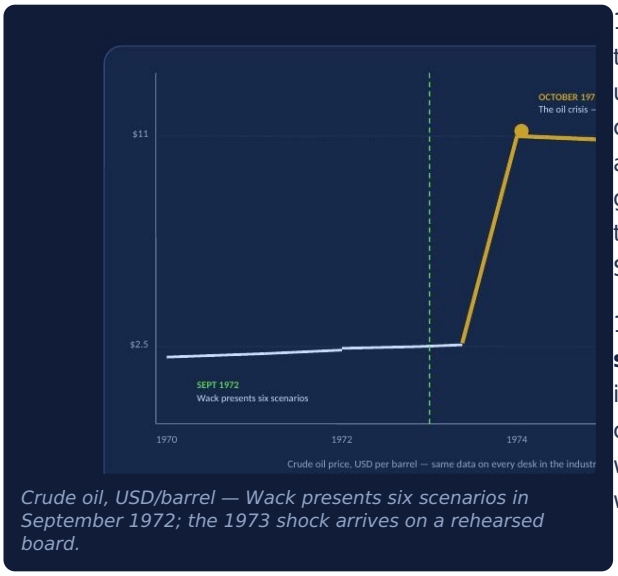
"You cannot predict. You can still see it first."

 Copyright Innovation 360, 2026 · my360.global

CHAPTER 1

Surprise Is a Method Failure

Shell 1972 · Kodak · the evidence · what a scenario is — and is not



Crude oil, USD/barrel — Wack presents six scenarios in September 1972; the 1973 shock arrives on a rehearsed board.

1.1 — Pierre Wack's planners did not predict the oil crisis; they rehearsed Shell's leadership on a small set of futures until recognition became reflex. When the embargo came, the "ugly sister of the seven sisters" moved first and came out among the strongest. The same decade gives the control case: Kodak's own engineers handed it the digital future, and the company filed the evidence. Same data — one had a method for it.

1.2 — The definition that carries the whole course: **a scenario is a hypothesis, never a prediction** — an internally consistent story about how the environment could develop, deliberately stretched to the extremes where insight lives. Not right or wrong: a safe sand pit in which leadership can fail early and cheaply.

1.3 — The evidence that this muscle is weak is not anecdote. InnoSurvey® — our capability assessment across 10,000+ organizations in 105 countries — scores "Exploiting Insights" at 3.2 of 5.0, the weakest ISO 56002 principle in the world. Over 85% of executives expect their industry to be disrupted within five years; most still plan as if tomorrow will look like today. The gap between expecting change and having a method is the cheapest competitive advantage available.

EXERCISE PREVIEW · YOUR RADAR, LIVE (WORKBOOK P. 1 · 15 MIN)

- You will build a PESTLED for your own organization — in the tool, with sources.
- Every force external, named, sourced, dated — never the business itself.
- Verdicts written down: what you act on now, what you scenario-plan.

 Copyright Innovation 360, 2026 · my360.global

CHAPTER 1 · CONTINUED

The Wider Field — Three Schools, One Choice

Kahn · Shell · GBN · the 2×2 — where our method stands, and why

Scenario practice is a field with schools, and it helps to know the map. The literature (Huss & Honton, 1987; Bradfield et al., 2005) distinguishes three. The **Intuitive Logics** school — born of Herman Kahn's RAND and Hudson Institute work, pioneered at SRI International and Royal Dutch/Shell, made permanent at Shell in 1972–73 — builds qualitative, internally consistent futures around critical uncertainties. It was standardized by the Global Business Network (founded 1987) and Peter Schwartz's The Art of the Long View (1991) into the famous 2×2 matrix and an eight-step process; van der Heijden's Scenarios: The Art of Strategic Conversations (1996) carried the Shell craft into general management. The **Probabilistic Modified Trends** school (Trend-Impact and Cross-Impact Analysis) extrapolates historical data and adjusts it with expert probabilities. And **La Prospective** — Michel Godet's French school — takes a mathematical, actor-based approach, historically strong in public-sector planning.

The IMGB method taught in this course sits squarely in the intuitive-logics lineage — Kahn to Shell to the 2×2 — for three deliberate reasons: it is business-born, it is workshop-native, and it produces futures leadership can inhabit rather than probabilities they will debate. On that lineage the method adds what the classics lacked: seven scanning dimensions (PESTLED extends the classic PEST/PESTEL with a demographic lens), a tool-industrialized pipeline (PESTLED360 → Scenarios360), AI as radar-not-oracle, and a hard hand-over into decision work — thresholds, options and capped experiments — so the scenarios never end as posters.

One vocabulary note the field often blurs and this course keeps sharp: **environmental scanning** observes what is happening; **strategic intelligence** explains what it means for us; **strategic foresight** asks what could happen — and what we would do then. Scanning without intelligence is a clipping service; intelligence without foresight is a rear-view mirror. Chapter by chapter, you will build all three — and Chapter 13 grounds them in the standard written for exactly this work: ISO 56006.

 Copyright Innovation 360, 2026 · my360.global

CHAPTER 2

SCAN — Seven Lenses, Zero Blind Sides

PESTLED · what a good force looks like · the 7 questions · the third source

Seven lenses — the disruption always comes through the lens you are not holding. Legal, Environmental and Demographic are where late surprises hide.

2.1 — Collect through all seven dimensions, one pass, no gaps: Political (regulation, mandates, geopolitics), Economic (costs, rates, cycles), Social (behavior, culture, expectations), Technological (capabilities, platforms, adoption), Legal (liability, compliance, contracts), Environmental (climate, resources, energy), Demographic (age, migration, talent). A good force is **external, named, sourced, dated — with a direction**. The test: can we move it? If yes, it is not a key driver. Never the business itself.

2.2 — People cannot list drivers cold, so ask better questions. The seven questions ask the future, not the list: what would you ask someone from the future; what does the desirable outcome look like; what would you worry about if things went wrong; what must change for things to go well; which successes and failures teach you; which priority actions are due soon; what would you do with absolute authority. Then walk the value chain — the third source: every link, supplier to end-customer, carries a force. Walk it once, then stop; coverage beats perfection — the sorting is where the magic is.

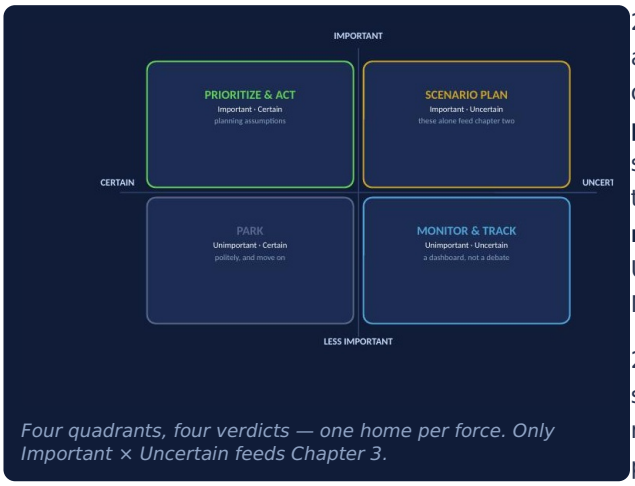
2.3 — In PESTLED360 you never start from a blank page: the collaborative canvas, the AI sweep, and the Global Key Driver Database — the world's first collaborative macro-driver library — are included with the course for three months. Clickable source or it does not enter.

 Copyright Innovation 360, 2026 · my360.global

CHAPTER 2 · CONTINUED

The Driver Map — Two Questions Sort Everything

Important × Certain · four verdicts · AI as radar, not oracle



Four quadrants, four verdicts — one home per force. Only Important × Uncertain feeds Chapter 3.

2.4 — Two questions sort everything: is it important, and is it certain? Four quadrants, four verdicts — and only one verdict per quadrant. Important + certain: **prioritize & act** — these are planning assumptions, not scenarios. Important + uncertain: **scenario-plan** — these alone feed the cross. Unimportant + uncertain: **monitor & track** — a dashboard, not a debate. Unimportant + certain: **park** — politely, and move on. Most strategy fights are quadrant confusion in disguise.

2.5 — AI's role is radar, not oracle: it sweeps a thousand sources and drafts candidate forces; you decide what is real, what matters, and what is certain. The scan pattern keeps running between reviews — but the verdicts are always yours. An AI that hallucinates a trend as confidently as a fact is exactly why the sourced-and-dated rule exists.

EXERCISE 1 · YOUR RADAR, LIVE (WORKBOOK P. 1 · 15 MIN)

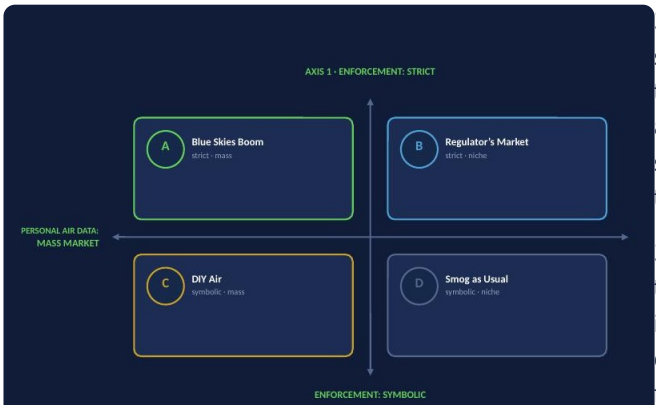
- Create a PESTLED for your own organization; draft forces across all seven dimensions — AI sweep + the Global Key Driver Database.
- Place every force on the Driver Map (Important × Certain) and write the verdicts in the Workbook.
- Note one surprise from the Global Key Driver Database — the force you had not considered.

Copyright Innovation 360, 2026 · my360.global

CHAPTER 3

SHAPE — Axes, and the Cross

Insight lives at the extremes · two axes, four futures · the first cross is rarely the best



ClearAir's cross — enforcement (strict ↔ symbolic) × personal air data (mass ↔ niche): four named, internally consistent futures.

3.1 — Take each important-but-uncertain driver and stretch it to two extreme poles. A driver in the middle teaches nothing; if a pole feels uncomfortable to say aloud, you have stretched enough. One driver stretches many ways — develop several, then rank the axes: you will cross only two at a time.

3.2 — Cross the two axes you cannot resolve — never the two you already agree on — and you get four internally consistent futures. Each quadrant is an obligation: the future has no duty to pick your favorite. Name them to stick — Blue Skies Boom, Regulator's Market, DIY Air, Smog as Usual — because leadership remembers stories, not grids.

3.3 — The first cross is rarely the best. You are prospecting: try a second pair, and another — when you find the pair that changes the room, you will know. Keep the best cross for development and park the rest; the discarded crosses are not waste, they are the proof you searched. Worked at pace: twelve space-industry drivers in, four futures out — one afternoon, the throughput of a team that knows the moves.

 Copyright Innovation 360, 2026 · my360.global

CHAPTER 3 · CONTINUED

Seven Steps — From Quadrant to World

World · company · direction · name · timeline · recommend · narrate — then attack your own futures

Seven steps from quadrant to decision-ready scenario — implemented end to end in Scenarios360 (Pervaiz, Claesson & Penker, 2019).

3.35 — Before the steps, the engine: every believable future runs on one MAIN LOOP — a reinforcing dynamic (R) that makes the world move — braked by balancing loops (B). Internally consistent means the loops close: walk every arrow and ask whether, in this world, each step truly causes the next. Where an arrow refuses to close, fix the scenario, not the arrow; the narrative you write later is the main loop told as a story (causal-loop thinking after Senge, 1990; wired in Scenarios360's Elaborate & Combine).

3.4 — Each kept quadrant becomes a world in seven steps: describe the **world** (five forces); your **company** in it (business model + value proposition); the **direction** of change (BRIC/SWOT); a **name** that sticks; a **timeline** — when it happens; **recommendations** — what to do; and the **narrative** — tell the story, because leadership remembers stories, not grids. In Scenarios360 the structure is wired in: fill the fields, use Inspiration, Generate Scenarios, and the Action List. The tool holds the structure; you bring the judgement.

3.5 — Then attack your own futures before reality does — at full price. Simulated stakeholders are cheaper than real surprises: probe each scenario as the customer who leaves, the regulator who tightens, the competitor who moves first. Live in the future for an hour. AI is a tireless sparring partner here — stress-test, red-team, find the seams — and every crack you find now is a crack reality does not get to find later.

EXERCISE 2 · FOUR FUTURES, NAMED (WORKBOOK P. 2 · 15 MIN)

- Connect your PESTLED to Scenarios360; stretch each critical uncertainty to two poles.
- Cross two axes — then try a second pair; keep the cross that changes the room.
- Generate and name four futures; note the one that made the room go quiet, and why.

 Copyright Innovation 360, 2026 · my360.global

CHAPTER 4

STEER — The Scenarios Were Never the Product

Common needs · option value · what the futures share

What recurs in all four futures — the real product of scenario work. No-regret moves live here.

4.1 — The master move: ask what all four futures share. What recurs regardless of which future arrives is a **common need** — and common needs are no-regret moves: fund them now, they survive whichever future shows up. For ClearAir: certified sensor accuracy, a channel to building owners, a data-privacy posture. Fund what recurs; hedge what does not.

4.2 — Foresight, priced: scenarios are worth money because they price your options. Not “we imagined futures” — “we priced our options.” Options that pay off in one future are bets; options that pay off in most are strategy; options that pay off in none just left the portfolio. That single reframe is what moves scenario work from the communications department to the CFO’s table.

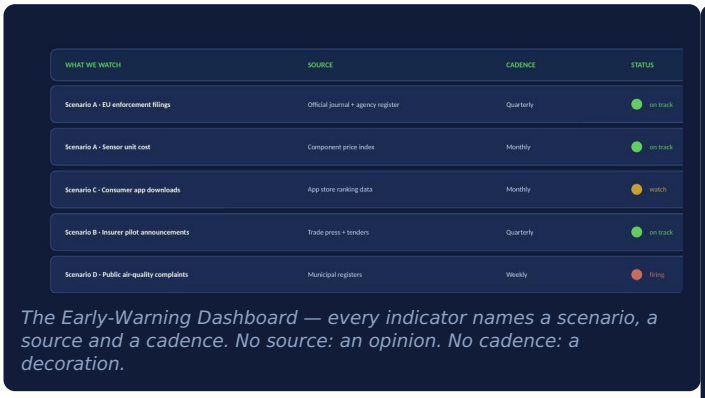
4.3 — The board language changes with it. Instead of “which future do you believe in?” — an argument no one can win — the question becomes “what do we do in all of them, and what do we prepare for some of them?” Preparation is cheap when it is early and deliberate: small steps that let you move fast later, taken while competitors are still debating point forecasts.

 Copyright Innovation 360, 2026 · my360.global

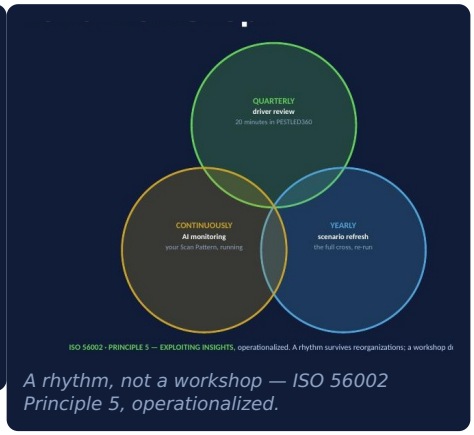
CHAPTER 4 · CONTINUED

Dashboards, Thresholds, and the Rhythm

What would we see first? · we act if — never on a date · quarterly · yearly · continuous



The Early-Warning Dashboard — every indicator names a scenario, a source and a cadence. No source: an opinion. No cadence: a decoration.



A rhythm, not a workshop — ISO 56002 Principle 5, operationalized.

4.4 — Per scenario, three indicators — the earliest visible signs that this future is arriving — each with a source (where exactly we look) and a cadence (how often). Together they are the Early-Warning Dashboard: the operational home of the monitor-and-track quadrant, and the modern form of Wack's grooming — leadership rehearsed to recognise a future on arrival. Foresight ends at the trigger: the sign, indicator plus level, written in advance as **"we act if …"** — never "we act on [date]". A bar set after you have seen the data is not a threshold; it is a rationalization. Setting the bar, sizing the stake, choosing between options — that is decision work: impact × uncertainty, thresholds, capped stakes, priced at the gate.

4.5 — Responses come in three kinds: **no-regret moves** (do in all futures — start now), **preparations** (small steps that let you move fast later), and **triggered bets** (actions tied to a dashboard sign). And the whole thing survives only as a rhythm: **quarterly** — twenty-minute driver review in PESTLED360; **yearly** — scenario refresh in Scenarios360; **continuously** — AI monitoring runs your scan pattern between reviews. A rhythm survives reorganizations; a workshop does not.

EXERCISE 3 · YOUR FORESIGHT BRIEF (WORKBOOK P. 3 · 15 MIN)

- Extract your three no-regret moves (common needs) — fund them now.
- Define your sharpest early-warning indicator: what · source · cadence.
- Write your first trigger: "We act if …" — and put the review rhythm in the calendar.

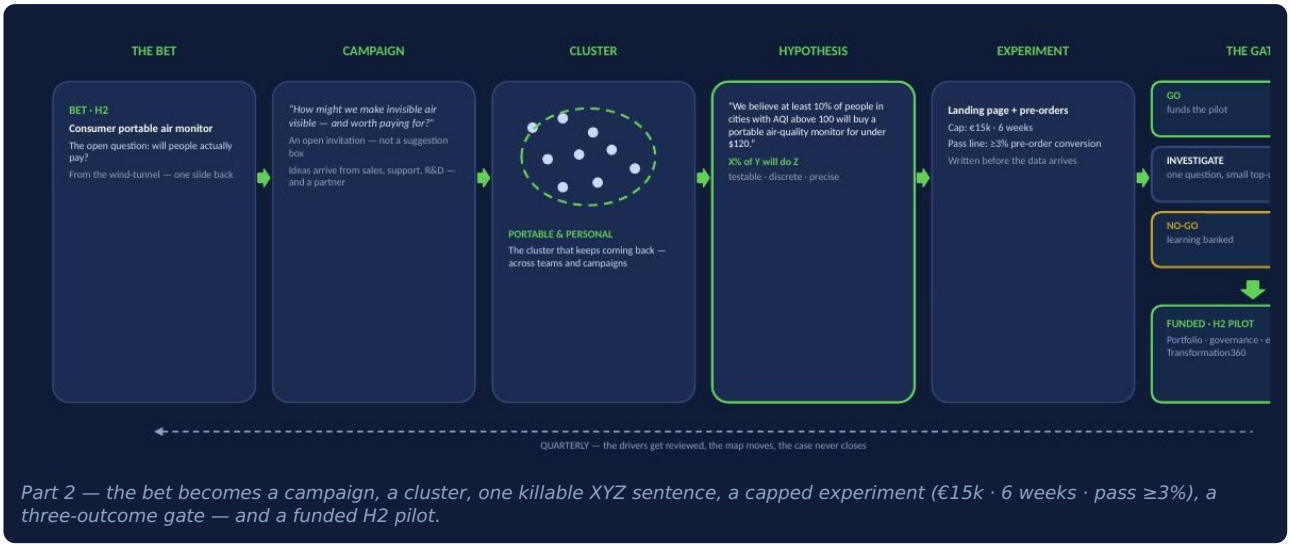
 Copyright Innovation 360, 2026 · my360.global

THE CASE

ClearAir — The Whole Journey on Two Pages

Seven drivers in · four futures · three initiatives · one killable sentence · a funded pilot

Part 1 — drivers sorted, futures named, strategies wind-tunneled, three initiatives on the table: ROBUST H1 · BET H2 · OPTION H3.



Part 2 — the bet becomes a campaign, a cluster, one killable XYZ sentence, a capped experiment (€15k · 6 weeks · pass ≥3%), a three-outcome gate — and a funded H2 pilot.

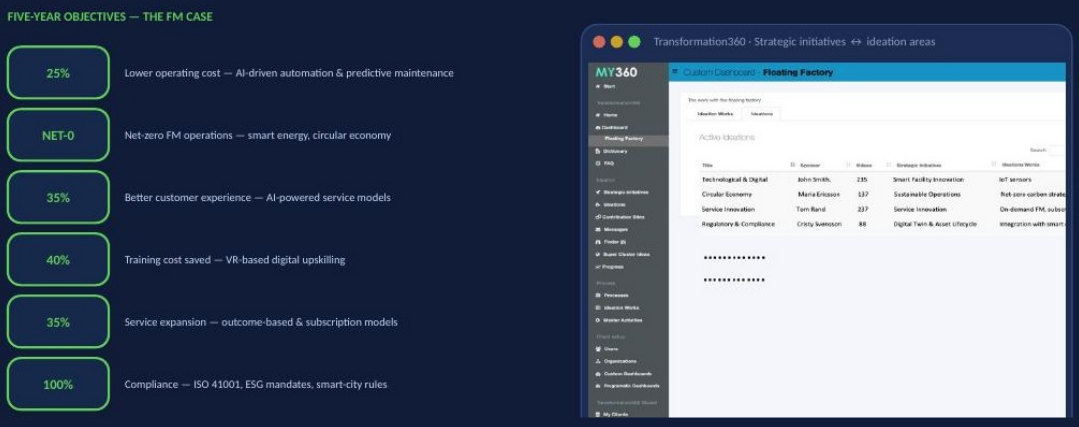
The same sentence all the way down: a driver became a future, the future a bet, the bet a hypothesis, the hypothesis a number at a gate. Shorter phases early, funding as evidence grows, every no-go banked as learning — that is how foresight connects to a funded project.

 Copyright Innovation 360, 2026 · my360.global

A Second Industry — and Numbers With Dates

Facility management · four ideation areas · five-year objectives · live in Transformation360

The FM case (Certified Strategic Innovation Roadmap Architect) — seven lenses on buildings, four strategic initiatives opened as ideation areas.



Direction becomes numbers — five-year objectives you can fail against — and lives in Transformation360: initiative ↔ ideation areas, sponsors, live idea counts.

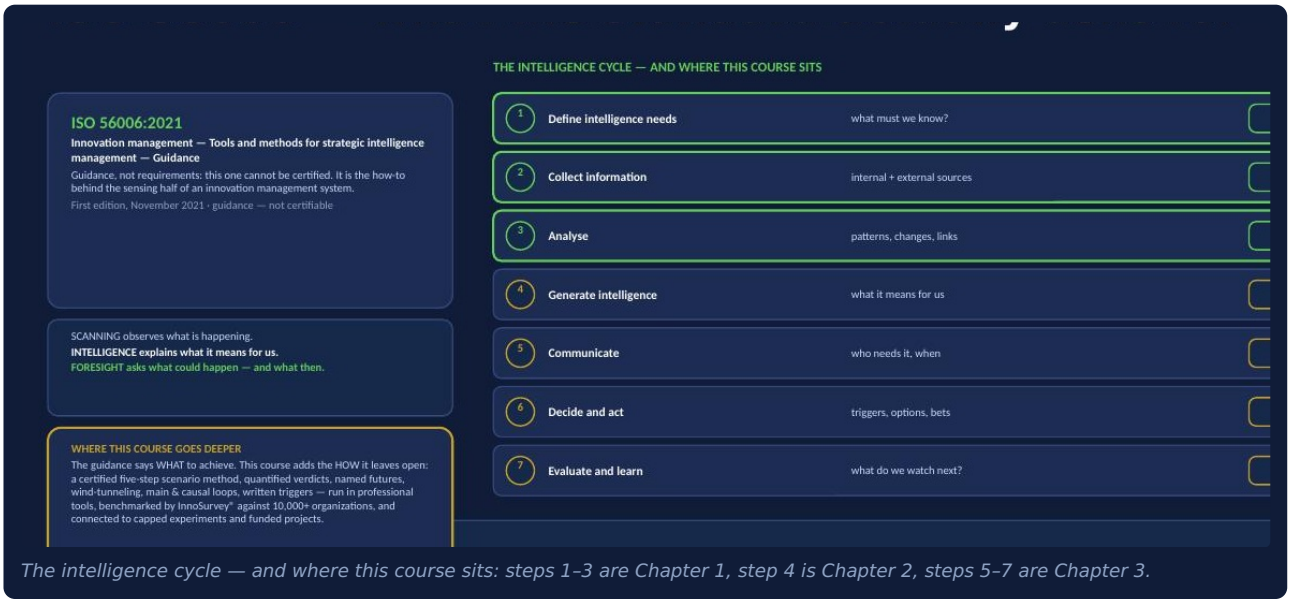
Two industries, one method. Every initiative traces back to a named driver on the seven-lens map — that audit trail from scan to direction is the discipline; the measurable objectives are what separate a strategy from a vision statement.

 Copyright Innovation 360, 2026 · my360.global

THE STANDARD

ISO 56006 — In Brief

Strategic intelligence · the intelligence cycle · where it threads through ISO 56001



The intelligence cycle — and where this course sits: steps 1–3 are Chapter 1, step 4 is Chapter 2, steps 5–7 are Chapter 3.

ISO 56006:2021 — Innovation management: Tools and methods for strategic intelligence management — Guidance (first edition, November 2021) is the member of the ISO 56000 family written for exactly this work. Guidance, not requirements — it cannot be certified against — but it is the how-to behind the sensing half of an innovation management system. Its core idea: information becomes **strategic intelligence** only once analysed and put in a strategic context so it can support decisions. Three words with precision: **scanning** observes what is happening; **intelligence** explains what it means for us; **foresight** asks what could happen — and what we would do then.

The working vocabulary: a **signal** is a single observation that something is changing; a **weak signal** is early and fragmented; a **trend** is a direction supported over time; a **driver** is the force underneath — and the chain runs data → information → knowledge → intelligence. Strategic intelligence also threads through the certifiable standard, ISO 56001: clause 4.1 (external context and scanning), 6.1 (intelligence informs risk identification), 7.1.5 (documented intelligence resources) and 8.2 (intelligence feeds opportunity identification). When an auditor asks how your organization senses change early enough to act on it — the artefacts you build in this course are the answer.

 Copyright Innovation 360, 2026 · my360.global

THE SYSTEM

From Four Futures to Funded Projects

One system · the tools · the book · repeatability

One system — foresight to funded project, with Transformation360 supporting every step and InnoSurvey® measuring the machine.

Foresight finds the areas: PESTLED360 and Scenarios360 turn drivers into four futures, and the futures into strategic initiatives — robust moves, bets and options on three horizons. H1 executes directly; H2–H3 carry real uncertainty, mapped as impact × uncertainty with thresholds instead of dates. Campaigns and non-linear ideation turn initiatives into clustered concepts and killable XYZ hypotheses — learning before executing. Sandboxed, capped experiments reduce the uncertainty test by test until you can evaluate — and start the project: one that solves a hard, relevant problem with high probability, before your competitors. InnoSurvey® creates the conditions for repeatability — leadership, culture, capabilities, processes — measured against 10,000+ organizations, improved, measured again. The ISO 56000 family connects when you want audits and formal ISO 56001 certification.

The full manual is the book: **Innovation by Design** — Innovation Management Systems for Global Impact (Penker & Purcell, 2024, Vol. 3 of The Complete Guide to Business Innovation; ISBN 9798335645058), foreword by astronaut Christer Fuglesang: “Innovation is a process, and the winners are those with the best processes.” It documents the vehicles (Classic · 3i · 5i), the six governance phases, commitment-based management, the nine questions, and field cases including CEVT/Zeekr.

 Copyright Innovation 360, 2026 · my360.global

REFERENCES

Sources & Further Reading

The lineage, the method, the standard — where to go deeper

The Shell tradition. Wack, P. (1985) “Scenarios: Uncharted Waters Ahead” and “Scenarios: Shooting the Rapids”, Harvard Business Review · Schwartz, P. (1991) The Art of the Long View · van der Heijden, K. (1996) Scenarios: The Art of Strategic Conversations · Shell (2013) 40 Years of Shell Scenarios.

Systems thinking. Senge, P. M. (1990) The Fifth Discipline: The Art & Practice of the Learning Organization, Doubleday — the causal-loop thinking behind every scenario’s engine (one main loop, braked by balancing loops).

Field proof. PETRONAS innovation stories — team narratives from an Innovation360 StoryLab engagement (HRM · the SVP office · Group Technical Solutions): what step seven looks like when a real organization takes it seriously.

The field. Huss, W. & Honton, E. (1987) “Scenario Planning — What Style Should You Use?” · Bradfield, R. et al. (2005) “The origins and evolution of scenario techniques in long range business planning”, Futures · UK Government Office for Science (2024) The Futures Toolkit · Baghai, Coley & White, The Alchemy of Growth (horizons — levels of uncertainty, not timelines).

The method and the tools. Pervaiz, Claesson & Penker (2019) — the seven-step scenario development implemented in Scenarios360 · Penker, M. (2023) the Innovation360 Uncertainty Model · PESTLED360, Scenarios360, Transformation360 and InnoSurvey® at my360.global.

The standards. ISO 56006:2021 Innovation management — Tools and methods for strategic intelligence management — Guidance · ISO 56002:2019 (incl. Principle 5, Exploiting Insights) · ISO 56001:2024 — the first certifiable innovation-management standard · ISO 56000:2025 vocabulary.

The book. Penker, M. & Purcell, G. (2024) Innovation by Design — Innovation Management Systems for Global Impact, Vol. 3 of The Complete Guide to Business Innovation; foreword by Christer Fuglesang; incl. the Classic/3i/5i frameworks, the six phases of innovation governance (© Innovation360 Group — Penker, Jacobson, Lindblom & Sävenstedt, 2017), commitment-based management (after Winograd & Flores, 1986), the nine questions, and the CEVT/Zeekr field essay (Skåpe) with the Deloitte (2015) discipline finding and R. G. McGrath on incubation and acceleration.

The evidence. InnoSurvey® — 10,000+ assessed organizations, 105 countries: “Exploiting Insights” 3.2/5.0, the weakest-scoring ISO 56002 principle in the world.

 Copyright Innovation 360, 2026 · my360.global

TAKE THE COURSE

See it coming — before your competitors do.

3 chapters · 9 recorded sub-chapters · 9 quizzes · 45 minutes hands-on on your own organization.
3 months of PESTLED360 & Scenarios360 included · optional verified certificate.
Enroll: app.my360.global — course: Intelligent Foresighting.

“What would we see first — and what do we do when we see it?”

Pictures licensed under Adobe Stock by Innovation 360. Intelligent Foresighting™ and InnoSurvey® are trademarks of Innovation 360 Group AB.
Copyright Innovation 360, 2026 · my360.global