



**AI-Empowered Design Thinking Tools
and AI Design Thinking Agents**

Design Thinking Tools and AI Design Thinking Agents



Part 1: Why Design Thinking Needs AI Now

Design Thinking has been developed for creative problem-solving across individuals and enterprises for more than 50 years. Today’s challenges are systemic, data-rich, and constantly shifting. Human-only processes struggle to keep up with the volume of signals from users, markets, and technology.

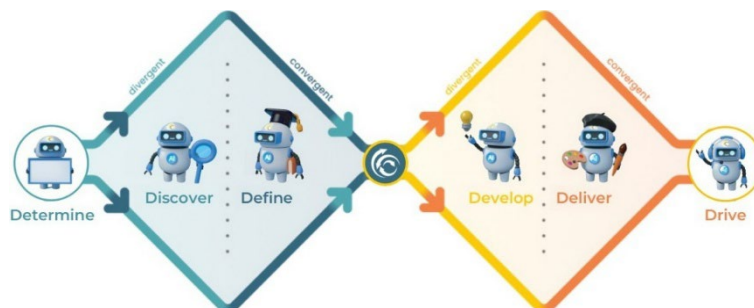
Generative AI and AI Agents bring computational cognition to the process, enabling them to analyze vast amounts of unstructured data, detect patterns, and surface insights that designers would otherwise miss. They scale empathy, co-creation, prototyping, and solution validation beyond what physical artifacts can handle.

Crucially, AI does not replace the human core of Design Thinking; it changes where human effort is best spent. Rather than manually sifting through data or exploring every design variant, humans can focus on framing, judgment, and ethical considerations while agents handle the heavy lifting of analysis and exploration.

Part 2: From Generic AI Agents to Specialized AI Design Thinking Agents

Most Design Thinkers start with generic AI agents to solve their challenges—general copilots that answer questions, summarize documents, or draft content for users. They deliver useful productivity gains, but loosely connected to innovation strategy and Design Thinking stages.

AI Design Thinking (DT3.0) Agents, by contrast, are intentionally governed and integrated: they are aligned with business, team, and enterprise innovation goals; guided by more than 150 specialized tools and best practices; and designed to work as a coordinated “AI innovation workforce” across the 6D Innovation Model (shown below).



Part 3: Difference between Generic AI Agents and Specialized AI DT Agents

Below is a comparison of Generic AI Agents and Specialized AI Design Thinking Agents in Business Innovation.

Item	Generic AI Agents	Specialized AI Design Thinking (DT3.0) Agents
(1) Focus & Governance	Individual & data support; task help, content, answers; stand-alone tools	Business, team & enterprise innovation; built into shared processes, stages, portfolio, KPIs
(2) Problem-Solving Approach	Answer ad-hoc asks; narrow, one-question-at-a-time responses	Guided by 150 specialized tools and hundreds of best practices for end-to-end innovation work
(3) Impact	Mainly individual-level efficiency; better documents, data, and analysis	Business/Team /Enterprise-level impact on strategy, revenue, cost, CX, EX
(4) Effectiveness & Speed	Quality and speed vary by user and prompt	Up to 95% faster innovation work; up to 90% accuracy on capturing and structuring user demands
(5) Scalability	No clear way to scale beyond individuals; fragmented, user-by-user adoption	Designed for enterprise-wide use; one coordinated “AI innovation workforce” deployed across the company

As summarized in the comparison table above, moving from generic AI agents to specialized AI Design Thinking Agents is therefore not just a tooling upgrade; it is a governance and capability shift that prepares the organization for scalable, continuous, AI-enabled innovation.

Part 4: The evolution of AI Design Thinking Agents

Researchers conclude that 17 AI Design Thinking Agents were developed from 2019 to 2025, and InnoEdge announced that they launched 150 AI Design Thinking Agents in January 2026 within their Design Thinking & Innovation Tool Hub (www.DesignThinking.Tools).

Step	IA Agent	Reference
Emphasize	Observation analysis	Walch & Karagianni (2020)
	Interview analysis	Walch & Karagiannis (2020)
Define	Persona generation	Schuller et al. (2024)
	Empathy map generation	Schuller et al. (2024)
Ideate	Requirements analysis	Ronanki et al. (2024); Sami et al. (2024)
	User flows	Jansen et al. (2021); Salminen et al. (2019)
	Hypothesis generation	Chung (2024); Liang et al. (2024)
	Idea prioritization	Salminen et al. (2019)
Prototype	UI image generation	Takaffoli et al. (2024); Chivukula et al. (2024)
	Screen generation	Suleri et al. (2019)
	Layout optimization	Bilgram & Laamann (2023)
Test	Test case generation	Nama et al. (2023) Ouédraogo et al. (2024)
	Agent testing	Wallach et al. (2020) Chivukula et al. (2023)
	Usability simulation	Chasalow & Levy (2021)

This rapid growth—from fewer than twenty documented agents to a fully articulated ecosystem of 150—highlights how quickly AI support for Design Thinking is evolving from isolated experiments to comprehensive, enterprise-ready portfolios. It signals that AI Agents are no longer peripheral tools, but an emerging infrastructure layer for scalable, data-aware, and relentlessly user-centered innovation.

150 AI Agents (www.DesignThinkers.AI) are categorized into 6 stages, including Determining Challenges, Discovering Information, Defining Opportunities, Developing Ideas, Delivering Solutions and Driving Changes.

They include standard and customized versions, including [Aviation](#), [Banking](#), [Insurance](#), [Government](#), [Hospitality](#), [Retail](#), [Social](#), and [Transportation](#), providing highly targeted support for each industry's strategic and innovation priorities.



Part 5: How AI Agents Operate in the Daily Workplace

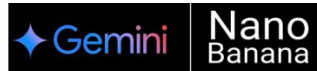
To enable leaders to drive innovation across multilingual, cross-border operations, the AI Agents are designed for seamless integration into everyday work. They operate in a truly always-on model, available 24 hours a day, 7 days a week, from any location via computers. In addition, they natively understand and analyze 10 languages, including English, Traditional Chinese (繁體中文), Simplified Chinese (簡體中文), French, German, Japanese, Spanish, Portuguese, Korean, and Polish.



Part 6: What Large Language Models (LLMs) Power the AI Agents

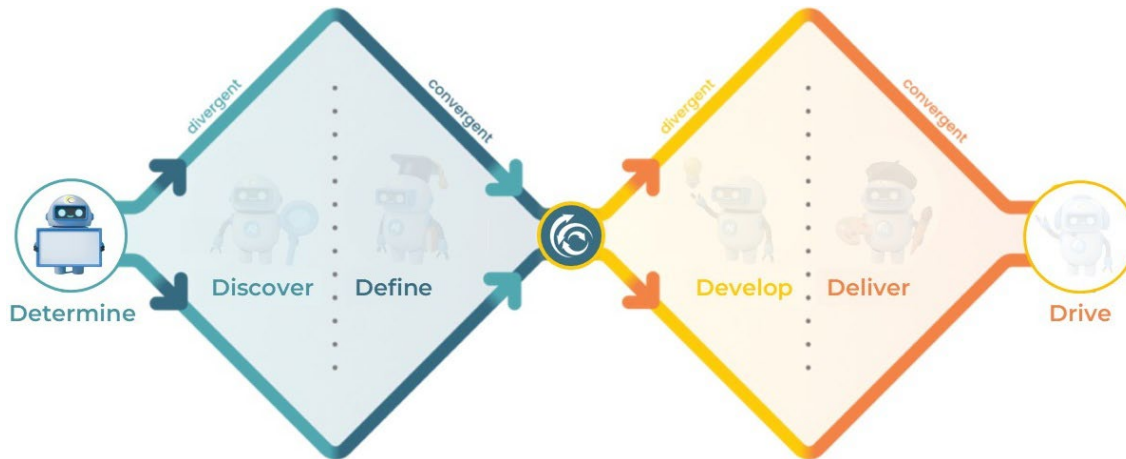
The core processing and document-format creation of our AI Design Thinking Agents are powered by the latest-generation OpenAI GPT large language models, delivering enterprise-grade reasoning, precision, and consistency across all analytical and narrative outputs.

Complementing this, Google Gemini Flash Image (Nano Banana) drives high-quality visual and image generation, enabling rapid production of clear, executive-ready canvases, blueprints, and illustrative assets that make complex innovation insights immediately understandable and action-oriented.



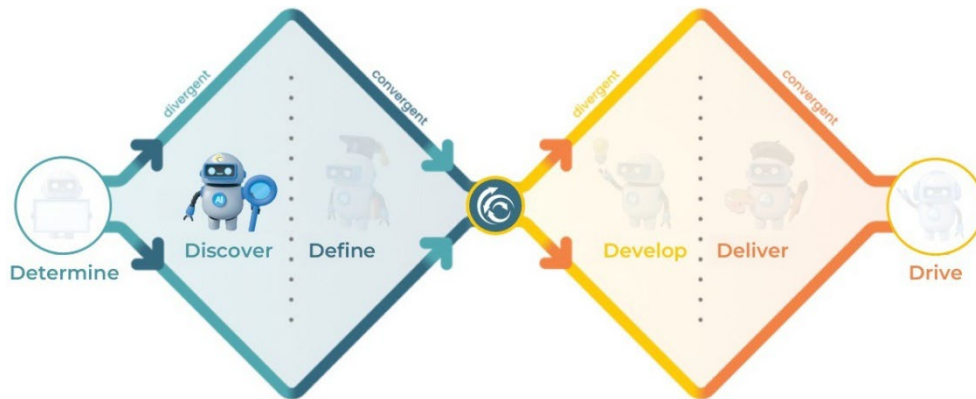
Part 7: The full list of AI Design Thinking Agents

Phase 1: Determining Major Changes and Challenges



Code	Techniques	AI Agents
101	Context Map (情境地圖)	AI Context Mapping Strategist
102	Vision Statement (願景陳述)	AI Vision Statement Architect
103	Extremes and Mainstreams (極端與主流地圖)	AI Extremes & Mainstreams Navigator
104	Value Proposition Mapping (價值主張地圖)	AI Value Proposition Curator
105	Challenge Statement (挑戰陳述)	AI Challenge Statement Designer
106	Knowns and Unknowns (已知與未知)	AI Knowns & Unknowns Navigator
107	Hopes and Fears (希望與畏懼)	AI Hopes & Fears Facilitator
108	Team Value Mapping (團隊價值地圖)	AI Team Value Mapping Specialist

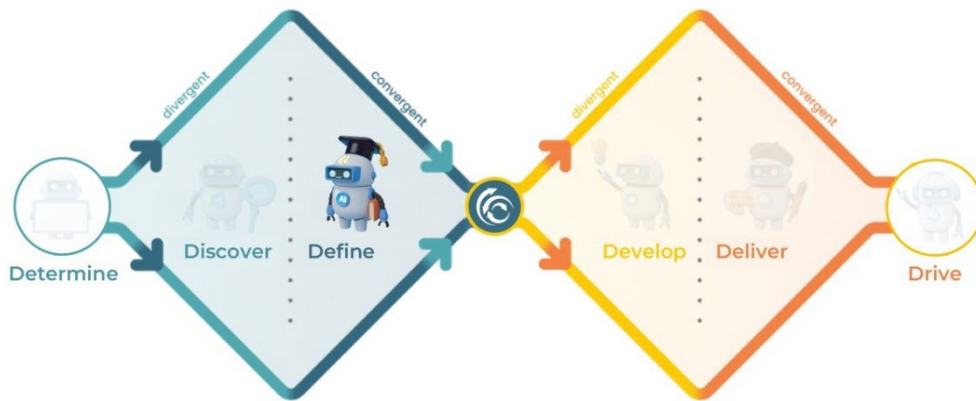
Phase 2: Discovering All-Rounded Information



Code	Techniques	AI Agents
201	Stakeholder Mapping (持份者地圖)	AI Stakeholder Mapping Analyst
202	Stakeholder Value Mapping (持份者價值地圖)	AI Stakeholder Value Strategist
203	Stakeholder Saliency Mapping (持份者重要性地圖)	AI Stakeholder Saliency Specialist
204	Stakeholders' Power-Interest Matrix (持份者權力-利益矩陣)	AI Power-Interest Matrix Navigator
210	Interview Question Design (訪談問題設計)	AI Interview Question Designer
211	Empathy Interviews (同理心訪談)	AI Empathy Interview Facilitator
212	Ethnographic Interviews (民族志訪談)	AI Ethnographic Insight Specialist
213	Mobile Ethnography (行動民族志訪談)	AI Mobile Ethnography Navigator
214	Contextual Interviews (情境訪談)	AI Contextual Interview Architect
215	Card Sorting (卡片排序法)	AI Card Sorting Coordinator
216	Collages (拼貼畫)	AI Collage Insight Curator
216	Expert Interviews (專家訪談)	AI Expert Interview Consultant
218	Focus and UnFocus Group (焦點及非焦點小組訪談)	AI Group Dialogue Facilitator
221	Cognitive Immersion (認知沉浸法)	AI Cognitive Immersion Strategist
222	Emotional Immersion (情感沉浸法)	AI Emotional Immersion Facilitator

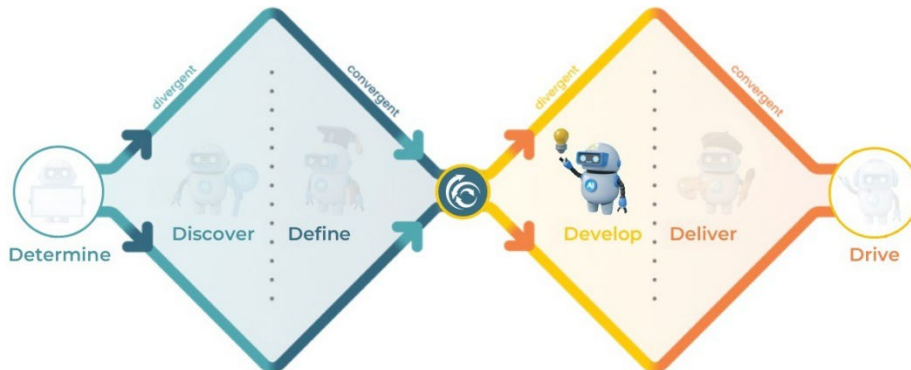
223	Spatial Immersion (空間沉浸法)	AI Spatial Immersion Navigator
224	Behavioral Immersion (行為沉浸法)	AI Behavioral Immersion Specialist
225	Ethnographic Immersion (人種誌式沉浸法)	AI Ethnographic Immersion Consultant
226	System Immersion (系統沉浸法)	AI System Immersion Architect
227	Sensory Immersion (感官沉浸法)	AI Sensory Immersion Curator
241	AEIOU (AEIOU 法則)	AI AEIOU Observation Architect
242	POEMS (POEMS 法則)	AI POEMS Insight Strategist
243	Heuristic evaluation (啟發式評估)	AI Heuristic Evaluation Specialist
244	A Day in the Life (日常生活模擬)	AI Day-in-the-Life Navigator
245	Shadowing (隨行觀察法)	AI Shadowing Observation Facilitator
246	Cultural Probe (文化探針)	AI Cultural Probe Curator
247	Photo Essays (照片散文)	AI Photo Essay Insight Curator
248	Fly-On-The-Wall (暗中式觀察)	AI Fly-on-the-Wall Observer
261	Analogous Research (類比調研)	AI Analogous Research Strategist
262	Desk Research (案頭調研)	AI Desk Research Manager

Phase 3: Defining Root Causes and Opportunities



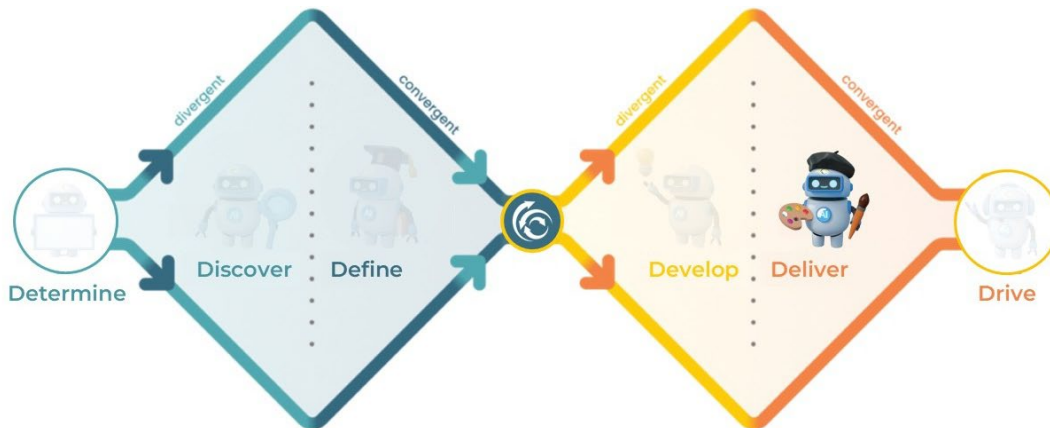
Code	Techniques	AI Agents
301	Clustering (簇群式聚類分析)	AI Clustering Insight Analyst AI Research Data Manager
302	Affinity Diagram (親和圖)	AI Affinity Diagram Facilitator
303	KJ Method (KJ 方法)	AI KJ Method Sense-Maker
304	Insight Statement (洞察陳述)	AI Insight Statement Architect
305	Empathy Map (同理心地圖)	AI Empathy Map Navigator
306	Persona Design (人物角色設計)	AI Persona Designer
307	Jobs-to-be-Done (待完成的任務)	AI Jobs-to-be-Done Strategist
308	Mental modeling (心智模型)	AI Mental Model Architect
309	Journey Mapping (旅程地圖)	AI User Journey Designer
310	System Mapping (系統地圖)	AI System Mapping Specialist
311	Value Stream Mapping (價值圖)	AI Value Stream Mapping Engineer
312	Why-How Laddering (為什麼-如何階梯)	AI Why-How Laddering Navigator
313	Abstraction Laddering (抽象階梯)	AI Abstraction Laddering Architect
314	Concept Mapping (概念地圖)	AI Concept Mapping Curator
315	2X2 Matrix (2X2 矩陣)	AI 2x2 Matrix Strategist
316	Problem Tree Analysis (問題樹分析)	AI Problem Tree Analyst
317	5 Whys (五個為什麼)	AI 5 Whys Root-Cause Specialist
318	Point of View Statement (設計觀點)	AI Point-of-View Statement Architect
319	How Might We Statement (我們如何能夠的陳述)	AI How-Might-We Statement Designer
320	User Problem Statement (用家問題的陳述)	AI User Problem Statement Strategist
321	Design Hypothesis and Principles (設計假設和原則)	AI Design Hypothesis & Principles Consultant

Phase 4: Developing Creative Ideas



Code	Techniques	AI Agents
401	Popcorn (爆米花)	AI Popcorn Ideation Booster
402	Mind-Mapping (心智圖)	AI Mind-Mapping Architect
403	Crazy 8 (瘋狂的八個想法)	AI Crazy 8 Idea Sprint Coach
404	Super-Power (假如我有超能力)	AI Super-Power Imagination Navigator
405	The Power of 10 (十次方)	AI Power-of-10 Idea Expander
406	Reverse Brainstorming (逆向式腦力激盪法)	AI Reverse Brainstorming Strategist
407	Impose Constraints (強制約束)	AI Constraint-Driven Creativity Specialist
408	Image-Ination (圖像激發)	AI Image-Ination Insight Curator
420	Brainwriting (書面式腦力激盪法)	AI Brainwriting Session Facilitator
421	Round Robin (循環賽式腦力激盪法)	AI Round Robin Idea Coordinator
422	Force Connections (強制聯繫)	AI Forced Connections Strategist
423	Figure Storming (形象式腦力激盪法)	AI Figure Storming Creativity Coach
424	Role Storming (角色腦力激盪法)	AI Role Storming Imagination Facilitator
425	1-2-4-All (1-2-4-全部)	AI 1-2-4-All Collaboration Orchestrator
426	Stepladder (階梯式參與法)	AI Stepladder Participation Architect
427	Creative Matrix (創意矩陣)	AI Creative Matrix Idea Architect
428	Time Machine (時光機)	AI Time Machine Future-Back Navigator
460	Desirability-Feasibility matrix (需求性-可行性矩陣)	AI Desirability-Feasibility Matrix Strategist
461	D-F-V Scorecard (D-F-V 評分卡)	AI D-F-V Scorecard Evaluator
462	RICE Method (RICE 法)	AI RICE Prioritization Specialist
463	M-S-C-W Analysis (M-S-C-W 分析)	AI M-S-C-W Portfolio Analyst
464	Kano Model (Kano 模型)	AI Kano Value Curve Consultant

Phase 5: Delivering Innovative Solutions



Functional Prototyping

Code	Techniques	AI Agents
501	Paper Prototypes (紙本原型)	AI Paper Prototype Designer
502	Clay Prototypes (黏土原型)	AI Clay Prototype Modeler
503	Concept Poster (概念海報)	AI Concept Poster Designer
504	Magazine Cover (雜誌封面)	AI Magazine Cover Storyboarder
505	Product Brochures (產品介紹)	AI Product Brochure Copy Builder
506	Product Packages (產品包裝)	AI Product Package Concept Designer
507	Data Sheet (資料表)	AI Data Sheet Specification Architect
508	Diagram (or Workflow) (圖表或工作流程圖)	AI Workflow Diagram Architect
509	Story Mountain (故事山)	AI Story Mountain Plot Architect
510	Story or Data Story Telling) (故事敘述或數據故事敘述)	AI Storytelling & Data Narrative Coach
511	Storyboards (故事板)	AI Storyboard Prototype Designer
512	Scenario or Experience Map (情境地圖或體驗地圖)	AI Scenario & Experience Map Designer
513	Service Blueprint(服務藍圖)	AI Service Blueprint Builder
514	Desktop Walkthrough (桌面模擬測試)	AI Desktop Walkthrough Facilitator
515	Customer Lifecycle Maps (客戶生命週期圖)	AI Customer Lifecycle Map Strategist
516	Assumption Testing (假設測試)	AI Assumption Testing Analyst
517	Wireframes (線框圖)	AI Wireframe Prototype Designer
518	Appearance Prototype (外觀原型)	AI Appearance Prototype Stylist
519	3D Print (3D 列印原型)	AI 3D Print Prototype Modeler
520	Pinocchio Experiment	AI Pinocchio Experiment Concept Tester

	(匹諾曹實驗)	
521	Boomerang (回力鏢測試)	AI Boomerang Feedback Loop Designer
522	Explainer Videos (解釋影片)	AI Explainer Video Storyboard Architect

Interactional Prototyping

Code	Techniques	AI Agents
531	Clickable Prototypes (可點擊原型)	AI Clickable Prototype Interaction Designer
532	Funnel Testing (漏斗測試)	AI Funnel Testing Conversion Analyst
533	Role Play (角色扮演)	AI Role Play Experience Facilitator
534	Reverse Role Play (反向角色扮演)	AI Reverse Role Play Insight Navigator
535	Link Tracking (連結追蹤)	AI Link Tracking Behavior Analyst
536	Feature Stub(功能占位測試)	AI Feature Stub Validation Specialist
537	404 Test (404 測試)	AI 404 Test Demand Probe
538	Card Sorting (卡片分類)	AI Card Sorting Information Architect
539	Speed Boat (速度船測試)	AI Speed Boat Friction Mapper
540	Single-Feature MVP (單功能最小可行產品)	AI Single-Feature MVP Architect
541	Mash-Up (混搭測試)	AI Mash-Up Concept Generator
542	Concierge (禮賓測試)	AI Concierge MVP Service Designer
543	Life-Size Layouts (實體尺寸布局)	AI Life-Size Layout Experience Planner
544	Wizard of Oz (綠野仙蹤式測試)	AI Wizard-of-Oz Simulation Orchestrator
545	Service Staging (服務排演)	AI Service Staging Director
546	Extreme Programming Spike (極限編程尖峰測試)	AI XP Spike Experiment Architect

Call-to-Action Prototyping

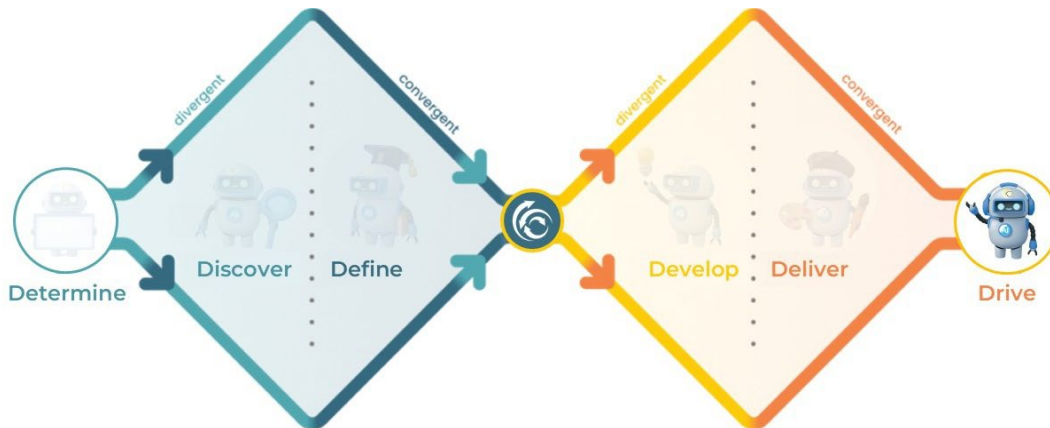
Code	Techniques	AI Agents
551	Buy a Feature (選購單一功能測試)	AI Buy-a-Feature Value Tester
552	Split Test (分測試)	AI Split Test Optimization Analyst
553	Mock Sale (模擬銷售)	AI Mock Sale Market Signal Analyst
554	Letter of Intent (意向書)	AI Letter-of-Intent Commitment Analyst
555	Simple Landing Page (簡易登陸頁)	AI Landing Page Conversion Designer
556	Social Media Polls (or “Like” or “Dislike”) (社群媒體投票或「喜歡」/「不喜歡」)	AI Social Poll Engagement Analyst
557	Social Sharing Tracking (社群分享追蹤)	AI Social Sharing Tracking Specialist
558	Mock Paywalls (模擬付費牆)	AI Mock Paywall Willingness-to-Pay Analyst

559	Pre-Sale or Pre-Order Testing (預售或預訂測試)	AI Pre-Sale Demand Validation Strategist
560	Referral Tracking (推薦追蹤)	AI Referral Tracking Growth Analyst
561	Pre-Launch Community Building (推出前社群建立)	AI Pre-Launch Community Builder
562	Mock Pop-Up Service Point (or Mock Pop-Up Store) (模擬快閃服務點或模擬快閃商店)	AI Mock Pop-Up Experiment Designer
563	Crowdfunding (群眾募資)	AI Crowdfunding Signal Strategist

Pitching and Feedback Analysis

Code	Techniques	AI Agents
571	Concept / Idea Pitch (概念 / 點子提案/簡報/)	AI Concept & Idea Pitch Designer
572	Napkin Pitch (餐紙提案)	AI Napkin Pitch Sketch Coach
573	Elevator Pitch (電梯提案)	AI Elevator Pitch Script Coach
574	Tweet Pitch (推特提案)	AI Tweet Pitch Message Optimizer
581	Feedback Capture Grid (反饋收集網格)	AI Feedback Capture Grid Organizer
582	I Like, I Wish, & What If (我喜歡、我希望和如可)	AI “Like–Wish–What-If” Insight Synthesizer
583	Visualize the Vote (視覺化投票)	AI Visual Vote Results Analyst
584	Hypothesis Prioritization Canvas (假設排序畫布)	AI Hypothesis Prioritization Canvas Strategist
585	Prototype Testing Plan (原型測試計劃)	AI Prototype Testing Plan Architect
586	Testing Card (測試咭)	AI Testing Card Designer
587	Learning Card (學習咭)	AI Learning Card Insight Curator

Phase 6: Driving Changes and Results



Code	Techniques	AI Agents
601	LEAN Canvas (精實畫布)	AI LEAN Canvas Strategy Designer
602	Service Model Canvas (服務模式畫布)	AI Service Model Canvas Architect
603	Business Model Canvas (商業模式畫布)	AI Business Model Canvas Architect
604	Social Business Model Canvas (社會企業式型畫布)	AI Social Business Model Canvas Strategist
605	Team Purpose Canvas (團隊目的畫布)	AI Team Purpose Canvas Facilitator
606	Culture Canvas (文化畫布)	AI Culture Canvas Transformation Designer
607	Operating Process Model Canvas (營運流程模型畫布)	AI Operating Process Model Canvas Architect
608	HR Process Model Canvas (人力資源流程模型畫布)	AI HR Process Model Canvas Designer
609	R&D Process Model Canvas (研發流程模型畫布)	AI R&D Process Model Canvas Strategist