

HSIMC · C0-008-6L · 2026-10-18

Consolidated strategy and expanded TOC / English

From Apps to GenAI Physical Tools

InstantReady Infrastructure for the Ten-Billion-Phone Opportunity

Activate Your Idle Phone for GenAI Work.

The phone is the invitation, not the boundary of the opportunity. Existing assets, authorized work and locally accepted outcomes form one HSIMC infrastructure.

9 Parts 30 Chapters 177 Subsections 9 Appendices

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<https://hsimc.tech/whitepaper/genai-physical-tools/editions/c0-008/en/>

Beyond App Control. Real-World Capability, Under Your Authority.

01 One concrete invitation, a wider productive possibility

Keep the Ten-Billion-Phone Activation Initiative focused on one understandable action: bring an existing phone into a bounded, useful Work. Old-School Assets. New Human Value. explains what that entry can unlock; it is not a competing programme. GSMA estimated 5–10 billion dormant phones in 2025: the title uses the upper end, not a verified population of eligible or authorized MCP servers. Activation creates possible supply and possible new demand, not guaranteed paid work. [S1]

02 MCP makes tools callable; physical readiness remains work

AI has a history beyond contemporary chat products. The official MCP 2026-07-28 revision removes protocol sessions and the initialization handshake and adds server/discover; it does not install power, repair interfaces or confer ownership. Use the date-based name, not an asserted official “MCP 2.0”. Our Sony pilot still uses 2025-11-25: selected battery access and the user's stop-button confirmation are evidence, while new-protocol conformance and stronger client binding remain separate work. [S2, S3, E1]

03 Begin where people live and work

The physical-work question is not where a model runs, but what this person can accomplish here. Check power and its delivery path; networking; interaction, structure and controlled physical action; then the computation, storage, software and models required. A microphone, speaker, old screen, support frame or suitable switch can retain useful value. This is a dependency-first design method, not a claim that digital-only work lacks value or that every asset should be reused.

04 Preserve useful parts; complete only missing conditions

Some devices can expose tools directly; others need a qualified Hub or adapter. Passive cables and structures can be documented dependencies without becoming servers. A two-core low-voltage power segment may be appropriate for a defined configuration, but not every phone interface: USB-C also has configuration-channel requirements. Verify compatibility, device-end voltage, physical fitting, heat, protection and recovery. Reuse a router only within an appropriate security/support boundary; a familiar enclosure is not proof of safe networking. [S4, S5]

05 Human authority is an execution boundary

An application remains useful for accessible approval, visible activity and revocation. Normal Work clients should receive bounded tools, not the ADB or administrator channel used for engineering. Separate device ownership, system permission, client identity, company authority and a particular Work grant. Revocation prevents future access within the implemented route; it cannot undo delivered information or a completed physical action. Motion, heat and other hazardous outputs need local safeguards independent of a model or network.

06 An operating foundation, not a display of private holdings

Supplied documents support the founder's GB 16844—1997 co-drafting and 2015 machine-vision/Industry 4.0 presentation. A supplied license records Shenzhen Elsun IOT Ltd.'s establishment on 5 April 2017; manufacturing Azure/Office 365 service from 2018 remains founder-reported. An InnoSpire agreement records an Advisor role. These support a practical engineering history, not universal company authority, current Microsoft certification or institutional endorsement. Private contracts, identity data, family relations and detailed equity records are not public attachments. [E2]

07 Independent HSIMC, qualified contributions

HSIMC initiates Work formation and integration. Pannex/Jinxingsaien may supply agreed cables, components or manufacturing services within demonstrated capability, alongside other qualified providers. They need not adopt the whole GenAI thesis, transform their legacy business or share HSIMC ownership. Keep application value first: accessible work participation, continuing services through physical products, and enterprise AI work delivered locally. NFC merchandise remains a bounded example; merchandise licensing, digital-content rights and a tap are not blanket authorization. [E2]

08 Tsim Sha Tsui: useful activity in existing space

A selected, authorized room can be studied as Boundary + State + Time: rest, useful work, accessible interaction, storage and restoration. Start with measured needs and reversible configurations; motorized beds or automated storage are later engineering scopes, not already-approved installations. A particular low-cost booking is an observation, not a district price or permission to convert premises. The goal is more accepted activity without degrading rest, access or dignity—not simply a higher room tariff. [E3, S6]

09 Kwun Tong 6K: the next better-supported design decision

The proposed value is a shorter loop from question to specimen, test and interpretation, not cheap production or regulatory arbitrage. An office-equipment-scale fabrication cell can bring selected learning steps closer to researchers; it is not a conventional printer that completes every USB-C product. Use external specialists and existing facilities when appropriate. A successful object or demonstration matters when it resolves a design uncertainty and another operator can repeat the method. No university-wide access or 6K laboratory accreditation is implied. [E3, S7]

10 Research, exhibition and trade: three decision windows

In research, obtain evidence for the next design decision. During a meeting or exhibition, verify a specified sample while the counterpart can still accept, revise or reject it. In trade, distinguish a product fault from missing operating conditions or changed use, then authorize a remedy or a safe stop. Preserve sample identity, conditions, custody, scope and separate engineering, commercial and regulatory acceptance. Travel observations are not a one-hour service promise; venue and process suitability require confirmation. [E4, S8]

11 A place reference is not a permission

HSIMC's Runtime Map lists 341,843 Hong Kong building reference identities within 356,782 total references. They are not active services or controlled premises. Bind a Work through the authorized room or position, time, device configuration, operator and evidence. InstantReady forms missing conditions; WorkShell/MakeHere support bounded execution; e-Person retains a working identity; AfterMake preserves consequences and continuity. Hong Kong's Super Value-adder narrative becomes a proposed path from international understanding to local evidence and accepted decisions, not official endorsement. [S9, S10]

12 Measure the value; make the next proof reproducible

Measure time to useful evidence, independent-operator success, recurring usefulness and total cost per accepted result. Do not multiply phone and building counts into revenue. Material traceability, retained functionality, work outcomes and environmental benefit are separate claims; GRS does not certify an entire reused node or room. The next bounded proof can connect an authorized Tsim Sha Tsui need, 6K verification and qualified supply, or a defined exhibition question. Publish what changed the decision—including justified rejection—without claiming the whole order as value created. [S11, E3, E4]

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English is the consolidated source. Other editions are AI-assisted research translations with aligned IDs and scope checks; independent professional language review remains pending. Publication is not device commissioning or authority to execute a proposed pilot.

Parts I

The Opportunity: From Idle Devices to Productive Possibility

01 The Ten-Billion-Phone Opportunity

- 1.1 Consumer obsolescence versus remaining productive capability
- 1.2 Dormant phones as distributed starting points—not a centrally owned inventory
- 1.3 Existing stock, future retirement and alternative AI adoption scenarios
- 1.4 From estimated devices to eligible nodes, active contributors and accepted work
- 1.5 The phone-first invitation and the wider existing-asset opportunity

02 From App-Centric Use to Intent-Driven Physical Tools

- 2.1 The shift from operating an app to requesting a real-world outcome
- 2.2 Keeping human interfaces while making bounded functions available to AI
- 2.3 A phone as a sensor, interface, computing resource and physical gateway
- 2.4 Why useful GenAI participation need not mean running a large model on the phone
- 2.5 Beyond App Control: from operating applications to authorizing capabilities

03 MCP as an Enabler—not the Complete Production System

- 3.1 The July 28, 2026 protocol shift and its implications for distributed capabilities
- 3.2 Discovery, invocation and interoperability across independent implementations
- 3.3 Stateless protocol interactions, persistent work identities and physical state
- 3.4 Protocol conformance, device readiness and accepted delivery as separate milestones
- 3.5 Date-based protocol conformance and the Sony pilot's older baseline

Parts II

Why HSIMC: The Infrastructure Beyond Device Activation

04 HSIMC's Existing Foundation

- 4.1 From physical-product engineering and modular systems to distributed capability production
- 4.2 Research trails: multimodal AI, workspaces, capability routing, NFC, vision and Local Edge
- 4.3 The 356,782 addressable Runtime reference identities: a substrate, not 356,782 executable services
- 4.4 Connecting existing experiments through shared contracts, evidence and continuity—not starting another isolated platform
- 4.5 Founder evidence and independent company participation are developed in Chapters 23–30
- 4.6 Documented enterprises, engineering participation and advisory appointments

05 Every Activated Node Can Supply Capability—and Reveal New Demand

- 5.1 A participant as capability contributor, work requester and beneficiary
- 5.2 Task-critical requirements that are local, time-bound and individually specific
- 5.3 Missing adapters, fixtures, methods, permissions, supervision and operating conditions
- 5.4 Where catalogue supply, minimum production quantities and lead times cease to fit the work
- 5.5 Complementing established supply chains with on-demand capability formation
- 5.6 Task-critical within a Work, heterogeneous across Works, changing with context

06 InstantReady: From Missing Conditions to Usable Capability

- 6.1 Ready for which Work, where, when and under whose Authority?
- 6.2 Reuse, adapt, generate, manufacture, validate—or select a different path
- 6.3 Deliver physically, transmit digitally or form the capability locally
- 6.4 InstantReady → WorkShell → MakeHere → accepted production and AfterMake continuity
- 6.5 Measuring time to usable capability—not promising instantaneous physical delivery
- 6.6 From missing physical conditions to qualified local supply
- 6.7 Readiness within a decision window, not unconditional instant delivery

Parts III

The Architecture: A Phone and the Reality Beyond It

07 The Phone Is the First Node—not the Boundary of the System

- 7.1 Native phone capabilities: sensing, display, storage, connectivity and computation
- 7.2 Reachable external capabilities: USB devices, NFC objects, sensors and authorized network services
- 7.3 A composed node as a server to one layer and a client or host to another
- 7.4 Phone → Local Hub → Personal Reality Pod → Team → Company → Community
- 7.5 Accessible does not mean owned, available, safe or authorized
- 7.6 Power paths, networks, interaction, structures and controlled physical action
- 7.7 Building reference to authorized room, device, time and evidenced capability

08 Tools, Resources and Capability Contracts

- 8.1 MCP Tools: callable functions with explicit inputs, outputs and execution boundaries
- 8.2 MCP Resources: URI-addressed data and context—not automatic ownership of physical assets
- 8.3 Representing external equipment, places, materials and expertise through governed interfaces
- 8.4 Capability manifests: provenance, current state, constraints, dependencies and acceptance evidence
- 8.5 Selective discovery and contribution without publishing the whole device or every reachable resource
- 8.6 Brands, trademarks and capability rights: distinct assets and permissions

09 Human Authority as an Operational Boundary

- 9.1 Ownership, Android permissions, client identity and Work authorization as distinct relationships
- 9.2 Granting a specific capability for a purpose, duration, usage limit and recipient
- 9.3 Simple approval, visible activity, accessible revocation and controlled in-flight completion
- 9.4 Separate maintenance privileges from normal MCP work access
- 9.5 Local-only, private-group and selectively shared participation—without default global exposure
- 9.6 No company permission inherited from personal relationships or maintenance access

Parts IV

e-Person: Turning Available Capabilities into Accountable Work

10 A Persistent Working Identity Across Changing Devices

- 10.1 e-Person as working identity—not a phone, SIM, model session or replacement human
- 10.2 Addressable Task Roles, assignments and scoped Human Supervision
- 10.3 Continuity across models, locations, devices and participating organizations
- 10.4 Replacing a device without losing work history—or silently transferring its authority
- 10.5 For Me: delegation and accountability, not unlimited ownership

11 From Intent to a Computable Work Graph

- 11.1 Expressing the intended Reality Delta and the conditions for acceptance
- 11.2 Resolving available capabilities before generating or sourcing new ones
- 11.3 Turning missing conditions into bounded child work
- 11.4 Parallel preparation, physical dependencies and explicit human decision points
- 11.5 Preserving the work when a tool fails, a node disappears or a model changes

12 Coordinating New Capability Formation

- 12.1 e-Person-supported discovery, specification, preparation and execution coordination
- 12.2 Bringing local contributors, manufacturers and professional supervisors into the same Work
- 12.3 Forming a new tool or resource configuration rather than matching only existing listings
- 12.4 Evidence → acceptance → reusable capability → the next productive opportunity
- 12.5 Keep one Work continuous across a user, workshop, supplier and receiving site

Parts V

Global Activation: Bring a Phone, Leave with a Verified Capability

13 A Local Commissioning Network for Global Participation

- 13.1 Self-service, assisted and professional activation pathways
- 13.2 Authorized activation stations and ATM-like commissioning kiosks
- 13.3 Check ownership and device condition; preserve or erase data only as authorized
- 13.4 Provision, bind, test, explain controls and issue an activation receipt
- 13.5 A locally delivered service with reusable global engineering methods

14 Multiple Upgrade Routes—not One Universal Reflash

- 14.1 Installing a bounded MCP-ready application on a supported existing system
- 14.2 Dedicated-device configuration where the operating system supports it
- 14.3 Owner-authorized OS replacement or reflashing on eligible devices
- 14.4 Hub-mediated participation when a phone cannot safely operate independently
- 14.5 Recovery, rollback, unsupported-device decisions and responsible retirement
- 14.6 Retain a whole device, reuse a subsystem or integrate through a qualified Hub

15 Making Existing Assets Work Where People Live and Work

- 15.1 Compatibility by tested capability, device configuration and operating conditions
- 15.2 Battery condition, power, heat, mounting and sustained operation
- 15.3 Combining external peripherals, network access and power without assuming compatibility
- 15.4 Intermittent connectivity, retries, safe stopping and restart behaviour
- 15.5 Signed updates, repair, vulnerability response and end-of-support decisions
- 15.6 Stable power and data at the human work position, not merely at the source
- 15.7 Mechanical fitting, accessible interaction, recoverability and independent safeguards
- 15.8 Office-scale research fabrication: selected processes, external specialists and verified limits

Parts VI

Evidence and Replication: From One Sony to Independent Field Work

16 The Sony Reference Journey

- 16.1 Installation failure, recovery and a repeatable development path
- 16.2 NFC writing and the distinction between user confirmation and independent readback
- 16.3 USB-glasses preview, the photo-save failure and the remaining capture acceptance
- 16.4 MCP battery access, one-tap approval and rejection of ungranted tools
- 16.5 Human-tested revocation, outstanding security tests and lessons transferable to other devices

17 The First Useful Work Templates

- 17.1 Authorized sample observation and evidence-backed product information
- 17.2 NFC-based physical-to-digital work handoff
- 17.3 Local inspection, learning and supervised visual assistance
- 17.4 For each template: intended outcome, required capabilities, consent, evidence and acceptance
- 17.5 Progressing from a successful tool call to a result another person can use
- 17.6 A sample question resolved while the exhibition decision window remains open
- 17.7 Trade continuity through qualified correction, adaptation or safe discontinuation

18 Reproducibility Before Scale Claims

- 18.1 Another phone, another operator, another place—the same bounded Work
- 18.2 Reference cohorts, compatibility matrices and explicit unsupported cases
- 18.3 Active-grant, revocation, concurrency and protocol-migration test suites
- 18.4 Distinguishing registry size, installations, active nodes and productive utilization
- 18.5 An evidence register that preserves failures and prevents unearned readiness claims
- 18.6 Sample identity, custody, conditions and distinct acceptance objects

Parts VII

The Economy and HSIMC's Global Kick Off

19 Contribution, Ownership and Economic Participation

- 19.1 Contributing device capability without surrendering the device or its data
- 19.2 Attributing tools, software, methods, manufacturing, local work and supervision
- 19.3 Access terms, usage measurement, acceptance, payment and dispute handling
- 19.4 Commercial work, research and sponsorship as distinct participation paths
- 19.5 Open interfaces and reusable knowledge alongside viable operating businesses
- 19.6 Independent suppliers: scoped orders, attributable contributions and agreed rights

20 The Economics of Instant, Individualized Capability

- 20.1 Cost per accepted outcome—not value inferred from the number of idle phones
- 20.2 Activation, models, connectivity, energy, maintenance and human support
- 20.3 When local formation is preferable to remote supply—and when it is not
- 20.4 Contribution incentives, uneven demand and sustainable local operation
- 20.5 Demand-creation hypotheses: testing the loop from more usable capability to more useful work
- 20.6 Useful activity in existing space and shorter research-decision cycles
- 20.7 Value of timely evidence without attributing the whole transaction to an intervention

21 Shared Prosperity as a Measurable Outcome

- 21.1 Lowering the entry cost for people, small businesses and local communities
- 21.2 New work in adaptation, fabrication, supervision, maintenance and teaching
- 21.3 Accessibility, language, jurisdiction and locally retained economic value
- 21.4 Privacy, labour quality, power imbalances and the distribution of benefits
- 21.5 Measuring productive reuse and environmental outcomes without assuming automatic benefits
- 21.6 Material traceability, functional reuse and measured outcomes—not assumed environmental benefit

22 HSIMC's Kick Off: From Reference Node to Capability-Formation Infrastructure

- 22.1 Freeze the accepted seed, close critical gaps and validate the first useful Work
- 22.2 Recruit independent device owners, engineers, local hosts and work customers
- 22.3 Pilot activation stations and repeatable commercial or sponsored delivery
- 22.4 Connect phone nodes to HSIMC Runtime references, InstantReady and e-Person
- 22.5 Extend beyond phones: new hardware, wearables and composed physical systems
- 22.6 An invitation to contribute existing Reality—and help form what does not yet exist
- 22.7 Begin from founder-accessible Hong Kong and Shenzhen sites, detailed in Chapter 29

Parts VIII

Evidence-based application paths: inclusion, continuing services and global work

23 InnoSpire: From Independent Mobility to Participation in Work

- 23.1 Existing visual-assistance products, HK Tech 300 context and the 2026 public mobility demonstration
- 23.2 People with visual impairments as contributors, colleagues and customers—not only recipients of assistance
- 23.3 Phone, smart glasses, accessible interfaces and permissioned human–AI collaboration
- 23.4 Co-designed tasks, training, human supervision, fair compensation and outcome evidence
- 23.5 First candidate: an accessible, supervised information task; mobility and employment claims tested separately

24 Physical Products as Entrances to Continuing Services

- 24.1 Existing product and manufacturing knowledge as qualified, Work-specific supply
- 24.2 A founder-confirmed FIFA Women's World Cup 2027 merchandise example: stay within the documented licence scope
- 24.3 NFC as an entry to information, assistance and separately authorized services
- 24.4 After-delivery content: provenance, accessibility, localization, support and revocation
- 24.5 Continuing value without inferring certification, digital-content rights or consent from a product or tap
- 24.6 HSIMC remains independent of a supplier's ownership and legacy business transformation

25 Kingsware: From AI Employees to Locally Delivered Global Work

- 25.1 Existing AI digital-employee and enterprise-agent capabilities as an industrial starting point
- 25.2 HSIMC's proposed contribution: local Reality, supervised delivery, permissioned interfaces and continuity
- 25.3 e-Person as durable working identity; Kingsware capabilities as separately scoped service contributions
- 25.4 Forming overseas operating capacity rather than merely translating software or adding a reseller
- 25.5 Paid work packages, contribution evidence, commercial agreements and staged strategic investment—not free transformation

26 Three Value Loops, One Shared Capability-Formation Infrastructure

- 26.1 Inclusion supplies new participants; physical products supply entrances; digital employees supply execution capabilities
- 26.2 A composed example: accessible assistance requested through an NFC object and completed as supervised Work
- 26.3 Shared contracts without assumed common ownership, management or exclusive dependence
- 26.4 Measuring value for users, contributors, channel partners, service providers and the initiating infrastructure
- 26.5 From one accepted result to reusable tools, resources and locally formed new demand

Parts IX

Founder, Hong Kong–Shenzhen Launch Reality and the First Deployable Work

27 About the Founder: A Documented Engineering Lineage

- 27.1 Benny Liao / Liao Yan: HSIMC founder and hands-on systems builder
- 27.2 GB 16844—1997: named co-drafter; international alignment, interchangeability, testing and abnormal-condition safety
- 27.3 Beijing 2015: Machine Vision and Industry 4.0; Nanjing 2016: service-robot development; Chengdu 2017: sensors and networked value
- 27.4 International product experience and a documented InnoSpire Advisor appointment
- 27.5 Connecting the earlier questions to GenAI-native infrastructure—without treating history as present-day certification
- 27.6 Shenzhen Elsun IOT Ltd.: documented 2017 establishment and the founder-reported cloud-service path

28 Hong Kong and Shenzhen as a Complementary Launch Base

- 28.1 Hong Kong: accessible innovation, global communication, commercial relationships and supervised work delivery
- 28.2 Shenzhen: component access, integration, fixtures, prototypes and capability-supply formation
- 28.3 Cross-boundary Work: one accepted task with separately identified parties, contributions and responsibilities
- 28.4 University and science-park settings as practical access contexts—not implied institutional endorsement
- 28.5 Global value added through deployable capability and continuity, not geographical labels alone
- 28.6 A capability-completion network for components, integration and cross-border work
- 28.7 Bilingual understanding translated into testable specifications and accepted decisions

29 Eight Founder-Accessible Starting Locations

- 29.1 Kwun Tong 6K: a candidate integration and physical-verification work position
- 29.2 Admiralty, PolyU campus, Wan Chai and Science Park: meetings, accessible research and engineering collaboration
- 29.3 Mirador Mansion Shop 23 and selected hotel rooms: user-facing entry and a proposed Personal Reality Pod
- 29.4 Futian Foreign Trade Building 21B: Shenzhen integration and supply coordination
- 29.5 One site, one responsible host, one bounded Work, one acceptance record before any scaled service claim
- 29.6 Tsim Sha Tsui and 6K as complementary proposed evidence settings, not an operating network claim

30 From Accessible Premises to Accepted Launch Work

- 30.1 A first reference site and three company-linked work briefs, not eight simultaneous product rollouts
- 30.2 Consent, equipment, operators, support, cost and local-use conditions before inviting users
- 30.3 Activation and recovery trials at an authorized desk; ATM-like self-service remains a later configuration
- 30.4 Publish evidence and repeat with another operator, device and site
- 30.5 Progressive manuscript development: freeze the TOC, then release each evidence-backed chapter with its version history
- 30.6 One bounded decision-window Work, real timing, explicit acceptance and independent replication

Appendices

- A Canonical terminology and protocol mapping
- B Evidence and source register
- C Reference node and capability contract
- D Authorized commissioning-station blueprint
- E Security and lifecycle acceptance matrix
- F Contributor and work-economics templates
- G Founder documentary register and publication permissions
- H Company relationship, licence and certification boundary register
- I Eight-site access, readiness and first-work register

Sources and traceability

English is the consolidated source. Other editions are AI-assisted research translations with aligned IDs and scope checks; independent professional language review remains pending. Publication is not device commissioning or authority to execute a proposed pilot.

[S1] GSMA / MWC · dormant-phone estimate (2025)

[S2] Dartmouth · AI proposal (1955)

[S3] MCP · official 2026-07-28 changes

[S4] Texas Instruments · USB Type-C configuration channel

[S5] Android · USB Host compatibility and permission

[S6] Hong Kong · guesthouse licensing context

[S7] Voltera · selected desktop PCB prototyping processes

[S8] AsiaWorld-Expo · venue rules (event rules also apply)

[S9] HSIMC · Runtime reference scope

[S10] HKSAR Government · Super Connector / Super Value-adder (2025)

[S11] Textile Exchange · RCS/GRS material and chain-of-custody scope

[E1] HSIMC · Sony P0-003 source, accepted local observations and owner report

[E2] Founder-supplied documentary evidence and C0-004 editorial decisions; restricted originals not published

[E3] HSIMC · C0-005 / C0-006 research and owner-reported site observations

[E4] HSIMC · C0-007 decision-window research; proposals, not deployed service levels

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