Proposal for a Fair Digital Transition of Physical Legacy Assets in Home Video Games

Full Proposal

A Transition Model Balancing the Continuity of Purchased Assets, Industrial Efficiency, Circularity, and Cultural Preservation

1. Structural Challenges in the Home Video Game Industry

The home video game industry is undergoing a continuing shift towards digital software distribution. However, adequate mechanisms have not yet been established to allow consumers to migrate physical game assets they already own into official digital environments.

Simply ending the supply of new physical media will not cause the consoles, software, and peripheral devices already circulating in the market to disappear.

One example is the continued circulation of Sega hardware and software through used-game markets, repair services, unofficial compatible hardware, and emulation environments even after the company withdrew from the home console business.

Where a platform ends its connection with the physical market without providing an official migration pathway, consumers' ability to carry forward assets they have purchased is impaired. This cannot be regarded as appropriate from the perspective of consumer protection.

Existing physical game assets will also continue to exist as an independent legacy market disconnected from the official markets of platform operators and software rights holders.

Without any ability for those operators and rights holders to manage or monetise them, such assets may continue to circulate through used-game markets, repair services, unofficial compatible hardware, emulation environments, and other external markets.

Even where consumers choose to migrate towards digital use, the absence of an official mechanism for carrying forward existing assets means that they will not necessarily select the digital market of the home video game platform they previously used.

Consumers may compare price, compatibility, convenience, and the predictability of future asset continuity, and may consequently migrate to other gaming platforms, personal computers, or unofficial environments.

At the same time, continuing the supply of new physical media indefinitely in the name of consumer protection would institutionalise the ongoing burdens of manufacturing, storage, transportation, inventory management, and disposal. It would therefore not constitute a sustainable long-term solution.

What the home video game industry requires is neither the abrupt exclusion of physical media nor the indefinite maintenance of the existing physical distribution system.

A formal framework is needed that protects consumers' existing physical game assets, gives the relevant stakeholders rational incentives to participate, and enables a gradual transition into official

digital markets.

2. Fundamental Principles of a Fair Digital Transition

The transition from physical media to digital environments is not completed merely by ending the supply of physical products.

To protect assets that consumers have already purchased while reconciling commercial digitalisation with broader social interests, the transition framework should be designed according to the following principles.

(1) Continuity of Purchased Assets

The discontinuation of new physical media or compatible hardware should not result in the de facto disappearance of game assets legitimately purchased by consumers.

Before deterioration of physical media or compatible hardware makes continued use impracticable, consumers should have access to an official pathway through which existing purchased assets can be migrated into future digital environments.

Such a pathway must not invalidate a consumer's previous purchase. Its purpose should be to carry that asset forward into an official future-use environment.

(2) Voluntary Consumer Choice

Digital migration should take place only on the basis of the consumer's free and informed choice.

The framework should not prevent consumers from retaining their physical media. Each consumer should be able to decide whether to keep a physical asset or surrender it in exchange for a digital entitlement.

Physical ownership may include possession of a tangible object and the ability to lend, gift, transfer, or resell it. These characteristics differ from those of a digital entitlement managed through an account.

Consumers should therefore not be compelled to make that conversion.

Digital migration should also not result in an excessive reduction of consumers' ability to dispose of their assets. Provided that duplication and concurrent use are prevented, official lending and transfer mechanisms should be available.

(3) Digital Entitlements Independent of Subscription Services

A digital entitlement granted through migration should, in principle, be equivalent to a standard buy-to-own digital version.

Continued subscription to a service, inclusion in a temporary catalogue, or continuation of a limited promotional programme should not be made a condition of use.

It would not constitute a fair asset transition if a consumer permanently surrendered a physical asset only for the resulting digital entitlement to disappear when a subscription service ended or a title was removed from a catalogue.

The entitlement should be linked directly to and managed through the consumer's platform account.

Except where an official lending or transfer procedure is used, it should not exist as a separate code, certificate, or freely reproducible and transferable instrument.

(4) Prevention of Recirculation and Material Recycling

A physical medium used to obtain a digital entitlement must be permanently removed from circulation so that the same item cannot subsequently be used for another migration or sale.

At the same time, collected media should not simply be discarded. Wherever technically feasible, they should be separated by material type and recycled.

Components that cannot be recycled should be disposed of appropriately in accordance with applicable law and regional environmental standards.

This would connect the digital migration of purchased assets with controlled collection and circular use of the physical materials.

These principles are not limited to any particular company, console, or intake method.

Each platform operator may select an implementation method appropriate to the relevant region, rights position, technical environment, and existing distribution network.

However, the framework should preserve the continuity of purchased assets, voluntary consumer choice, entitlements independent of subscription services, appropriate lending and transfer mechanisms, and responsible recycling of collected media.

3. Official Digital Migration Framework for Physical Game Assets

This section proposes a reference model for implementing the principles described above by granting a corresponding digital entitlement in exchange for the collection of a physical game medium.

A consumer would bring an eligible genuine physical game medium to an authorised intake point and pay the prescribed migration fee.

Eligible physical game media would include optical discs, game cartridges, and other forms of recording media originally sold through authorised channels.

The basic structure would be a one-to-one asset conversion.

One genuine physical game medium would be collected and permanently removed from circulation. In exchange, one digital entitlement predetermined as corresponding to that physical product would be granted to a designated platform account.

The relationship between a physical product and its corresponding digital version would be determined in advance by the platform operator and software rights holder, taking account of standard editions, budget editions, complete editions, editions bundled with additional content, and regional variants.

Participation would remain voluntary and would not prevent consumers from choosing to retain their physical media.

The consumer would choose to surrender a physical asset that can be possessed, transferred, or resold in exchange for a digital entitlement managed through a designated platform account.

At the intake point, the following matters would be confirmed:

- that the title and physical medium are eligible under the framework;
- that the physical game medium appears to have been legitimately manufactured or sold;
- the content of the digital entitlement corresponding to that medium; and
- the platform account to which the entitlement is to be granted.

Physical game media released in the future should be designed with eventual digital migration in mind.

Platform operators should issue a standardised anti-counterfeiting certification mark for such products.

The mark should be affixed directly to the medium or placed in a location from which it cannot easily be separated. It could combine holograms, microtext, ultraviolet-reactive elements, product-identification information, and other authentication technologies.

The specification should allow intake staff to assess the likelihood that a medium is genuine within a short period of time, without requiring specialist reading equipment or functional testing of the game content.

Where appropriate, the certification mark could include machine-readable information such as the product number, regional specification, media type, or manufacturing lot.

This information could then be compared with the eligible-title records held in the intake system.

Such a system would reduce reliance on the individual expertise of intake staff and would help limit intake time, erroneous acceptance, and the risk of counterfeit media entering the system.

The certification mark should not, however, be treated as absolute proof of authenticity.

Additional checks should be required only where the mark is damaged, appears to have been altered, or does not correspond with the registered product information.

Standardising certification marks for future physical media would not merely simplify intake procedures.

It would provide the foundation for managing legitimate distribution, collection, digital migration, and material recycling as a single product lifecycle.

Account authentication should be performed directly by the consumer using a smartphone or another personal device.

Intake staff would confirm only that authentication had been completed and identify the destination account.

They would not need to handle the consumer’s password, authentication code, payment credentials, or other sensitive account information.

Once the required checks had been completed, the corresponding digital entitlement would, in principle, be granted to the account at the time of intake.

Where necessary, a receipt or electronic record linked to the account and intake transaction could be issued.

Freely transferable download codes, migration vouchers, or other independent instruments representing the entitlement would not be issued.

Where a consumer later wished to lend or transfer the digital entitlement, the transaction would be conducted through an official account-to-account procedure managed by the platform operator.

Consumers would therefore be able to complete the migration process on the same day without preparing the media for mailing, arranging individual delivery, or waiting through a lengthy review process.

The digital entitlement granted under this framework should be equivalent to a standard buy-to-own digital version.

Continued subscription to a service, inclusion in a temporary catalogue, or continuation of a limited promotional programme should not be made a condition of use.

Collected physical game media should be stored in a manner that maintains a traceable link with the relevant intake transaction and consolidated into defined quantities by intake location or region.

Intake data would be transmitted as each transaction occurred.

At a later stage, the platform operator or designated management body would reconcile the physical media received with the intake records.

Procedures for discrepancies, allocation of responsibility, liability for losses, consumer remedies, and other operational conditions should be defined contractually between the platform operator and the intake operator.

The framework is not intended to resell or reuse collected items as playable game media.

For this reason, full functional testing of the game or a complete read test of the recorded data would not ordinarily be necessary.

Intake procedures could remain comparatively simple where staff are able to confirm the eligible title, the type of medium, and the likelihood that it is a genuine physical game product.

Following reconciliation against the intake records, the collected media would be rendered permanently non-circulable and transferred to an approved processing operator.

Cases, packaging, printed inserts, and other accompanying materials collected at the same time should, wherever technically feasible, be separated and recycled.

Components that cannot be recycled should be disposed of appropriately in accordance with applicable law and regional environmental standards.

4. Intake and Collection Network

It would generally be appropriate to commission authorised retailers that continuously sell the relevant platform's products and services and already maintain commercial relationships with the platform operator.

Using existing commercial partners would provide access to established retail locations, contractual relationships, sales procedures, face-to-face customer-service capabilities, and logistics infrastructure.

Rather than constructing entirely new national intake and logistics networks, the framework could be implemented by adding the functions required for verification, collection, storage, identification, consolidation, and shipment of physical media to existing distribution networks.

Depending on the regional distribution structure, retail network, and legal environment, the framework could also use locations operated directly by platform operators, approved collection operators, or other designated intake points.

Under any arrangement, the consumer transaction, destination account, and collected medium must remain traceably linked so that the physical item can later be reconciled with the intake data.

Intake operations should be subject to an administrative service fee calculated according to the number or type of transactions processed.

The consumer visits generated by the framework could also create opportunities to sell consoles, peripheral devices, software, and related services.

Collected media should be appropriately identified and stored by each intake location.

Once a defined quantity has been reached, the media could be consolidated using existing delivery networks, return logistics, or scheduled collection services.

Following reconciliation against the intake records, consolidated media would be rendered permanently non-circulable and transferred through approved processing operators for separation, recycling, or appropriate disposal.

Where an operator holds substantial quantities of used-game inventory, allowing that same operator to determine eligibility at an official intake point may create a conflict of interest between the disposal of its own inventory and objective intake decisions.

For this reason, businesses whose principal activity is used-game retail and official intake points responsible for determining eligibility should, in principle, remain separate.

5. Effects on Relevant Stakeholders

(1) Consumers

Consumers would be able to convert physical game assets they already own into corresponding digital entitlements through an official procedure.

Eligible products acquired through the used-game market could also be migrated after purchase at an authorised intake point.

A system designed to complete the process on the day of intake would limit the time burden and psychological uncertainty associated with mailing, arranging individual delivery, or waiting through a lengthy review process.

It would also reduce concerns relating to deterioration of physical media, failure of compatible hardware or reading devices, loss, and physical storage.

Consumers would remain free to choose, according to their own circumstances and preferences, whether to retain a physical medium or migrate to a digital entitlement managed through a platform account.

Official lending and transfer mechanisms would allow some of the functions associated with physical assets—including lending to family members or acquaintances, gifting, and transfers between individuals—to remain available after migration.

By receiving an entitlement equivalent to a standard buy-to-own digital version, consumers could continue using purchased assets in an official environment without depending on an active subscription or the title's continued inclusion in a temporary catalogue.

This would reduce uncertainty arising from future changes in compatible hardware and declining availability of physical media, and would improve predictability regarding the continuity of purchased game assets.

(2) Platform Operators

Platform operators would be able to convert physical game assets currently circulating in used and other external markets into digital entitlements managed within their official account ecosystems.

The framework would not require the platform operator to purchase physical media directly from the used-game market.

Consumers themselves would surrender physical media they already own or have acquired through

the used market and would pay the prescribed migration fee.

Platform operators could therefore recover existing physical assets and migrate them into the official digital market without bearing the full cost of acquiring those assets.

Managing the resulting entitlements through official accounts would encourage continued account use, engagement with related services, and migration to future compatible hardware.

Data generated through the framework would also provide evidence of actual demand for legacy titles.

This information could be used when considering re-release, backward compatibility, official emulation, or negotiations with software rights holders.

Physical assets from which platform operators previously received no revenue through used-game circulation could generate new income through migration fees, transfer fees, and subsequent related consumer spending.

Providing an official pathway for carrying purchased assets forward could also reduce some of the practical incentives for consumers to use unofficial compatible hardware, unofficial emulators, and other unofficial environments.

The contraction of physical-media supply could thereby be treated not as a process of losing contact with existing consumers, but as an opportunity to migrate both consumers and their assets into an official digital environment.

(3) Software Rights Holders

When the same physical game medium is repeatedly bought and sold in the used market, the software rights holder ordinarily receives no additional revenue.

Under this framework, a portion of the migration fee paid by the consumer could be distributed contractually to the relevant software rights holder.

This would create a new revenue opportunity from titles that had already been sold.

Physical game assets continuing to circulate through the used market could therefore be reconnected to an official revenue structure in which the rights holder participates.

Migration volumes, expressions of interest, and regional demand could also provide quantitative evidence of actual demand for individual legacy titles.

This data could support comparison between the expected revenue and the costs of rights clearance, contract renewal, digitisation, porting, official emulation, and re-release.

Where re-release had previously been deferred because rights were complex or demand was uncertain, evidence of sufficient demand and commercial viability could create an economic incentive to resolve rights issues and proceed with official distribution.

Legacy titles could consequently be reassessed not merely as works requiring preservation, but as assets capable of generating revenue while maintaining relationships with existing users.

(4) Intake Operators

Intake operators could receive an administrative service fee based on the number of physical media verification, collection, storage, and shipment transactions they process.

Visits generated by the framework could also be connected to sales of the following products and services:

- game consoles;
- peripheral devices;
- game software and download codes; and
- subscription services and other platform-related services.

Existing retail locations, storage facilities, and logistics networks could be used to generate additional service revenue without constructing an entirely new business infrastructure.

Where existing delivery services or return logistics can be used to consolidate and ship collected media, the framework would also support more efficient use of logistics resources.

It would further provide an opportunity to rebuild contact with consumers who own legacy game assets and introduce them to current products, related services, and future platform environments.

The framework would not require intake operators to provide unpaid assistance or absorb a social obligation.

It would offer existing commercial partners and authorised retailers a new contracted service, a reason for consumers to visit their premises, and additional sales opportunities.

(5) Used-Game, Repair, Unofficial Compatible Hardware, and Emulation Markets

Physical game media used for migration would be collected and permanently removed from circulation.

However, consumers would be able to migrate not only media they already own, but also eligible media acquired through the used-game market.

Used-game retailers would therefore not immediately lose the value of existing inventory when the framework was introduced.

They could sell eligible stock to consumers seeking to migrate those titles into digital form, allowing them to monetise inventory while adapting to a gradual contraction of the market.

Each use of the framework would remove an eligible medium from the used market, meaning that the total quantity of physical game media in circulation would decline continuously.

The existing used-game market could therefore contract gradually and predictably without immediately eliminating the value of retailer inventory.

Consumers who migrate to an official digital version would no longer need to maintain an older console, optical drive, cartridge slot, or other physical-media reading device solely to use that title.

Some practical demand for repair of older hardware, replacement components, and unofficial compatible devices would consequently decline.

For legacy titles, an official execution environment offering features such as quick saving, rewind, display correction, resolution enhancement, reduced loading times, and other conveniences would further reduce the practical reasons for ordinary users to choose unofficial compatible hardware or unofficial emulators.

Demand relating to collecting, the distinctive controls and display characteristics of original hardware, preservation of the physical media themselves, and titles not supported by the official framework would remain.

The purpose of the framework would therefore not be to eliminate used-game, repair, unofficial compatible hardware, or emulation markets entirely.

Its purpose would be to continuously absorb ordinary consumer demand into a convenient official digital environment that preserves asset continuity, thereby reducing both demand flowing into external markets and their scope for future growth.

(6) Recycling Operators

Compared with disposal by dispersed individual consumers, physical game media, cases, packaging materials, and printed inserts collected through the framework could be consolidated, identified, and separated according to common standards.

Under contracts with the platform operator or designated management body, recycling operators could undertake separation, permanent removal from circulation, material recovery, and appropriate disposal.

This would generate new processing demand proportionate to the duration of the programme and the volume of material collected.

Aggregated information concerning media type, date of manufacture, material composition, and collected quantities could support standardisation of treatment methods, higher recycling rates, and lower processing costs.

Because the framework would apply to a finite stock of physical assets already circulating in the market, collection volumes would likely peak after launch or expansion and then gradually decline.

It would therefore be appropriate to use existing facilities, regional processing capacity, and consolidation points, adjusting throughput to changes in demand rather than constructing permanent large-scale facilities solely for the framework.

The framework would not merely convert physical media into waste.

It would connect digital migration of consumer assets, prevention of recirculation, material recovery, and appropriate disposal within a single controlled process, thereby linking the contraction of the physical game market to circular use of resources.

(7) Consumer-Protection and Competition-Policy Effects

Where new physical media or compatible hardware are discontinued, placing the entire burden on consumers may effectively require them to purchase the same title again in digital form in order to continue using an asset they have already bought.

The framework would prevent the costs of a company's distribution-policy change from being transferred entirely to consumers by providing a pathway through which legitimately acquired physical game assets can be converted into entitlements equivalent to standard buy-to-own digital versions.

Participation would remain voluntary, preserving the option to retain physical media and preventing conversion against the consumer's wishes.

Consumers should be informed in advance of the migration fee, eligible titles, content of the entitlement, compatible hardware, regional restrictions, lending and transfer conditions, and treatment of entitlements if a service is discontinued.

They would then be able to compare the benefits and disadvantages before deciding whether to migrate.

Account authentication performed directly by the consumer, without intake operators handling passwords, authentication codes, or payment credentials, would also reduce information-security risks.

From a competition-policy perspective, the end of physical media should not become an opportunity to require uniform repurchase.

Platforms should instead compete on migration fees, scope of eligible assets, backward compatibility, quality of official execution environments, continuity of entitlements, and the conditions governing lending and transfer.

The axis of competition could thereby shift away from how much of the existing asset base a platform is able to abandon and towards how fairly and conveniently it allows consumers to carry that asset base forward.

Where migration conditions and performance data are published or made comparable, consumers, public authorities, and market participants would be able to evaluate the digital-transition policies of individual platform operators in concrete terms.

This framework alone would not resolve every issue associated with digital-market lock-in, concentration of platform stores, or dependence on accounts.

However, it would contribute to consumer protection and fair competition by reducing the practical compulsion to repurchase caused by the end of physical media and by requiring platform operators to assume greater responsibility for explaining and managing the transition for existing users.

(8) Preservation of Video Game Culture and Original Works

Home video games are not merely software products.

They are cultural works combining visual art, music, writing, control systems, direction, technical constraints, and the hardware environment of their time.

Where physical media and compatible hardware deteriorate and official execution environments disappear, the survival of some underlying data does not necessarily allow ordinary users to experience the work in a form reasonably equivalent to the original.

By making demand for legacy titles visible and supporting official digital versions, backward compatibility, porting, and official emulation, the framework would reconnect works with the market while preserving them as usable cultural assets.

Preservation of the original work should remain distinct from modern remaking or reinterpretation.

The existence of a remake that substantially alters visuals, sound, controls, difficulty, expressive content, or game progression does not by itself mean that the original version has been preserved.

Wherever possible, an official version materially equivalent to the original should remain available.

Optional convenience features may then be added, including display correction, resolution enhancement, reduced loading times, quick saving, rewind, and control assistance.

Regional versions, language differences, update histories, manuals, associated materials, and contemporary sales information should also be documented alongside the work.

This would preserve historical context that cannot be retained through a single set of game data alone.

Where rights or technical limitations prevent exact reproduction of the original state, the changes and elements that cannot be reproduced should be disclosed.

Consumers could then distinguish between a version materially equivalent to the original, a modern remake, and a work incorporating a new interpretation.

The framework is not intended to collect every physical copy or eliminate the existence of original materials.

Items held by collectors, libraries, museums, research institutions, rights holders, and preservation organisations may have cultural and research value as physical artefacts.

Migrating a portion of the media used by ordinary consumers into an official digital environment while preserving representative media, hardware, associated materials, and regional variants as physical

records would allow continuity of use and preservation of historical evidence to coexist.

Digital migration of physical game assets should therefore not be treated merely as disposal of outdated products.

It would provide a foundation for maintaining official access to original works, distinguishing them from remakes, and carrying video game culture forward to future users, researchers, and creators.

6. Phased Implementation

The framework would not need to cover every title, type of physical medium, region, and intake point from the outset.

It would be appropriate to begin with a limited pilot programme and expand the framework gradually while assessing operational performance and patterns of use.

During the first phase, priority should be given to titles that meet the following conditions:

- a corresponding digital version already exists;
- the platform operator or participating software rights holder owns the relevant rights;
- the rights necessary for digital distribution and the granting of digital entitlements have been clarified;
- the relationship between the physical and digital versions is clear;
- the treatment of standard editions, budget editions, complete editions, editions bundled with additional content, and regional variants can be defined in advance; and
- the information required for intake, collection, reconciliation, and recycling can be managed.

The pilot programme should begin in one or more selected regions and at a limited number of intake points.

It would also be appropriate to begin with selected locations operated by authorised businesses that continuously handle the relevant platform's products and services and already maintain commercial relationships with the platform operator.

During the pilot phase, the following matters should be assessed:

- the number of intake transactions by title and region;
- average processing time per transaction;
- the burden involved in verifying and identifying eligible media;
- success rates for account authentication and entitlement granting;
- reconciliation results between intake records and collected media;
- costs associated with storage, consolidation, transport, and recycling;
- the incidence of enquiries, complaints, erroneous acceptance, and attempted misuse; and
- aggregated patterns of use recorded without identifying individual consumers.

The results should be used to revise intake procedures, account authentication, media identification, data management, logistics, outsourcing contracts, and information provided to consumers.

Once operational stability has been confirmed, eligible titles, types of media, intake points, and participating regions could be expanded in stages.

Expansion should not be based solely on previous sales volumes.

Consumer demand for migration, the difficulty of rights clearance, technical feasibility, cultural significance, and the availability of an official execution environment should all be considered.

Migration fees, revenue distribution to software rights holders, administrative payments to intake operators, collection and recycling costs, and other commercial terms should be determined by platform operators and participating businesses according to the title, region, contractual conditions, and operating costs.

The migration fee should remain sufficiently lower than the cost of repurchasing a standard digital version to preserve a rational incentive to use the framework.

At the same time, it must be sufficient to cover the costs of intake, rights administration, entitlement granting, logistics, and recycling.

Phased implementation would allow the effectiveness of the framework to be tested while limiting initial concentrations of demand, logistics burdens, and operational uncertainty.

7. Expansion of Eligible Titles and Measurement of Demand

Following use of the framework, consumers should be invited to identify titles they would like to see made eligible for future digital migration.

In addition, platform account services could include a function allowing consumers who have not yet used the framework, including those who own potentially eligible physical game assets, to register interest in particular titles.

Where necessary, an official website or other public channel should also allow former users who no longer use the relevant platform to submit requests.

Interest registration could collect more detailed information than the title name alone.

This could include the type of physical medium owned, regional version, preferred execution environment, and acceptable range of migration fees.

Such information would provide a more concrete indication of potential demand.

Priority for adding titles should be determined by considering the following factors together:

- the number of post-migration survey responses and title requests;
- the state of rights clearance and the ability to provide the title in each region;
- the technical difficulty of backward compatibility, official emulation, or porting;
- the costs of entitlement granting, operation, maintenance, and rights administration;
- the willingness of software rights holders to participate; and

- the importance of the title for preservation of the original work and continuity of video game culture.

An expression of interest indicates possible future demand, but does not necessarily result in actual use of the framework or willingness to pay.

By contrast, completed migrations and actual payment of fees provide a stronger market signal because they demonstrate demand for which consumers have accepted a financial cost.

Expressions of interest, survey responses, and completed migrations should therefore be recorded separately and evaluated according to their different evidential value.

To avoid overstating demand through duplicate submissions by the same consumer, each account should, in principle, be permitted to register interest in each title only once.

The method of aggregation and the criteria used for evaluation should be clearly disclosed.

This would allow potential demand to be measured beyond the existing user base of the framework and would support the gradual addition and official re-release of titles for which willingness to pay, rights feasibility, and technical viability have been demonstrated.

Once the common infrastructure has been established, a title should not necessarily be excluded solely because advance demand forecasts are uncertain.

Where the marginal cost of implementation and operation is acceptable, it may be appropriate to make the title available and measure actual demand through use.

Where demand proves lower than expected, the software rights holder and platform operator may decide to end new migration intake or new sales for that title.

However, consumers who have already received the digital entitlement, including those who have lawfully acquired it through transfer, must retain access to the download or re-download mechanisms necessary for continued use.

Once rights clearance and digitisation have been completed, a title may be capable of being made available again at a lower initial cost than during its first official re-release if demand subsequently increases.

The framework would therefore function not only as a means of converting physical game assets into digital entitlements, but also as an ongoing market-research infrastructure for measuring demand for legacy titles.

Accumulated demand data could support future decisions concerning legacy-title strategy, rights clearance, backward compatibility, official emulation, porting, preservation of versions materially equivalent to the original, and development of related products.

8. Anticipated Operational Issues and Proposed Responses

(1) Concentration of Intake Demand and Logistics Burdens

When the framework is launched, and immediately after new titles are added, consumers may bring in large quantities of physical game assets already circulating in the market.

If demand exceeds processing capacity, waiting times at intake points, storage volumes, data-entry workloads, and consolidated transport requirements may increase.

However, the physical game media covered by the framework constitute a finite stock of assets already circulating in the market.

As collection progresses, the total quantity of eligible media remaining in circulation will decline.

Intake demand and logistics burdens should therefore also decrease gradually.

The temporary level of demand at launch should not be treated as the required level of permanent processing capacity.

Concentrated demand could be managed through measures including:

- monthly limits on the number of migrations per account;
- gradual addition of eligible titles;
- initial restriction to selected regions and intake points;
- appointment systems or advance registration; and
- adjustment of intake volumes according to the processing and storage capacity of each location.

Logistics burdens could be reduced by consolidating collected media at store or regional level instead of transporting each item separately.

Existing delivery networks, return logistics, or scheduled collection services could then be used.

Transaction volumes, storage levels, and transport volumes should be monitored continuously.

Where a region approaches its processing capacity, temporary intake restrictions, adjustments to the timing of title additions, or increased collection frequency could be introduced.

When expanding the framework, required processing capacity could be calculated using data from pilot regions, including processing time per transaction, average storage period, transport frequency, and local recycling capacity.

Concentration of intake demand and logistics burdens should therefore not be regarded as problems that will grow permanently as the framework continues.

They are temporary migration demands relating to a finite stock of physical assets and can be controlled upstream through intake limits, phased implementation, advance registration, consolidated transport, and continuous monitoring.

(2) Duplicate Registration and Large-Scale Conversion

The same digital entitlement for the same title should not ordinarily be granted more than once to the same platform account.

For standard editions, complete editions, regional variants, and other different product configurations, the relationship between the physical product and the digital version should be defined in advance.

The scope within which different physical products are treated as corresponding to the same entitlement should also be clearly established.

At intake, the system should confirm whether the destination account already holds the relevant digital entitlement.

Where the same entitlement is already present, the physical medium should not be collected and the migration should not be accepted.

To manage initial concentrations of demand and discourage large-volume submissions, temporary limits could be applied, such as a maximum of three titles per account per month.

Such limits should be set at a level that does not unreasonably obstruct ordinary consumers seeking to migrate their personal assets.

They would reduce large submissions by a small number of users, short-term processing concentrations, and conversions inconsistent with the intended purpose of the framework.

Limits should not remain permanently fixed.

They should be adjusted in response to actual demand, processing capacity at intake points, storage volumes, logistics burdens, and observed misuse.

Where demand stabilises and sufficient capacity becomes available, limits could be relaxed.

Where a temporary increase in demand is expected following the addition of new titles, limits could be reduced for a defined period.

Duplicate registration and large-scale conversion would therefore be controlled at different stages.

Duplicate registration would be prevented through system checks before an entitlement is granted, while large-scale conversion would be managed through volume limits.

(3) Lending and Transfer of Digital Entitlements

Digital entitlements granted under the framework should not necessarily be permanently fixed to a single account.

It would be desirable to permit lending or transfer to another account through official procedures managed by the platform operator.

However, a single entitlement must not generate multiple entitlements.

Only one valid entitlement should exist before, during, and after any lending or transfer transaction.

Duplication and concurrent use by multiple accounts must be prevented.

Lending would temporarily reassign use of the entitlement to another account for a defined period.

During the lending period, the title would be unavailable through the lending account.

At the end of the period, or following an early-return procedure, the entitlement would return to the original account.

Eligible recipients could be limited to accounts within a family group or accounts that have been mutually approved in advance.

This would preserve, within reasonable limits, the ability to lend games to family members and acquaintances that generally existed with physical media.

A permanent transfer would change the account to which the entitlement belongs.

Following transfer, the originating account would no longer be able to use the title.

Duplication and dual ownership would not be permitted.

Transfers could be used in circumstances including:

- migration of assets between accounts belonging to the same person;
- gifts to family members or acquaintances;
- paid or unpaid transfers based on agreement between individuals; and
- transfer of a title no longer available for new purchase from a person who no longer wishes to use it to another person who does.

Both the originating and receiving accounts should authenticate and confirm the transfer through the platform.

Freely transferable download codes or other independent instruments representing the entitlement should not be issued.

Transfers should be processed solely as platform-managed account-to-account transactions.

A modest transfer fee could be charged to cover system operation, authentication, transaction records, and rights administration.

The fee should remain low enough not to obstruct legitimate family transfers or transfers between individuals.

At the same time, it should reduce the commercial viability of businesses based on the mechanical

transfer of large quantities of entitlements.

Where payment is made between individuals, the price should generally be determined by agreement between the parties.

The platform operator would ordinarily process only the transfer of the entitlement.

Scarcity premiums or price differences may arise in private transactions involving rare titles no longer available for new sale.

However, where the entitlement is not duplicated, the originating entitlement is reliably deactivated, and the transaction is otherwise lawful, there is scope to recognise such transfers as asset transactions between consumers in a manner analogous to used physical-media sales.

The platform should retain the transfer history of each entitlement so that its current location and transfer route can be verified.

This would allow digital entitlements to remain account-managed while partially preserving the lending, gifting, and transfer functions associated with physical assets without allowing duplication.

(4) Counterfeit Media and Fraudulent Large-Scale Conversion

The framework should not prohibit all lending and transfer.

Instead, official platform-managed procedures should be used to distinguish legitimate asset transfers from fraudulent large-scale conversion.

Digital entitlements would be granted directly to the consumer's account when migration is completed.

Freely transferable download codes, migration vouchers, or other independent instruments would not be issued.

A transfer to a third party would require authentication by both the originating and receiving accounts, deactivation of the originating entitlement, and payment of the prescribed transfer fee.

Even where counterfeit media were used to obtain large numbers of digital entitlements, monetising those entitlements would therefore require numerous accounts, payment of migration and transfer fees, and repeated individual transfer procedures.

Duplicate registration of the same title to one account would not be permitted.

Limits on the number of migrations and transfers within a defined period could further restrict large-scale conversion through a single account.

Where necessary, a minimum holding period could be imposed before the first transfer of an entitlement obtained through physical-media migration.

Where an abnormal number of migrations or transfers is associated with the same consumer, device,

contact information, payment method, or intake point, additional checks or temporary restrictions could be applied.

Any such action should use only the minimum information necessary and should comply with applicable law and data-protection principles.

The combination of migration fees, transfer fees, account-management costs, and the risk of suspension would reduce the economic rationality of manufacturing counterfeit media and converting them into entitlements for resale.

At the same time, ordinary lending, gifting, and transfers between individuals should not be burdened by excessive authentication, lengthy holding periods, or high fees.

The framework should not treat every transfer as fraudulent and prohibit it.

It should preserve consumers' ability to dispose of their assets while preventing duplication and circulation of entitlement instruments outside the platform's control by bringing legitimate lending and transfer within an official management system.

9. Preservation and Official Execution Environments for Legacy Titles

Legacy titles present different implementation requirements from newer titles for which a corresponding buy-to-own digital version already exists.

It may not be possible simply to associate the physical medium with an existing digital entitlement. An official execution environment may first need to be created or maintained.

Legacy titles should therefore generally be included from the second phase onwards, taking account of existing backward-compatibility functions, official emulation environments, porting feasibility, rights status, and technical viability.

Possible official delivery methods include:

- backward compatibility on current hardware;
- local execution through official emulation;
- porting adapted for current environments;
- remote execution through cloud streaming; and
- reconstruction of a version materially equivalent to the original, limited to what is technically or legally necessary.

No single delivery method should be prescribed for every title.

The appropriate method should be selected according to the hardware architecture of the relevant generation, software specifications, dependence on peripheral devices, online functionality, rights position, and operating cost.

Cloud streaming may make it easier to reproduce specialised hardware configurations and reduce dependence on the performance of the consumer's local device.

However, it is also affected by network quality, latency, service availability by region, and continuing operating costs.

Where technically possible, consumers should therefore also have access to local execution, backward compatibility, or official emulation.

Where technological development makes a new execution method practicable, existing methods should not necessarily be discontinued immediately.

It may be appropriate to offer several methods concurrently or to migrate gradually after comparing user convenience, operating cost, and fidelity to the original.

Official execution environments could include the following optional convenience features:

- quick saving and resumption from arbitrary points;
- rewind;
- resolution enhancement and adjustment of the displayed area;
- image filters and display settings reproducing historical display environments;
- reduced loading times;
- fast-forward where technically possible;
- configurable controls and button remapping for current input devices; and
- accessibility functions supporting visibility and ease of operation.

These functions should be implemented as aids that improve access to the original work in modern environments.

Where possible, consumers should be able to enable or disable them so that the title can also be experienced under conditions close to its historical specification.

A version materially equivalent to the original must remain distinguishable from a remake or reinterpretation that changes the content.

Where changes have been made, their nature and extent should be disclosed.

For titles with regional, language, version, update-history, or bundled-content differences, the relationship between the collected physical medium and the digital entitlement granted should be defined in advance.

Where functions dependent on peripheral devices, external servers, communication services, or expired rights cannot be fully reproduced, unavailable functions and changes from the original should be disclosed.

An official asset-migration pathway combined with an official execution environment offering both convenience and fidelity to the original would reduce the practical reasons for ordinary consumers to depend on older hardware, deteriorating physical media, unofficial compatible devices, or unofficial emulators.

Making legacy titles eligible would not merely constitute the resale of older products.

It would preserve official access to original works, carry them forward as usable cultural assets, and reconnect them to the official markets of platform operators and software rights holders.

Preservation should also cover more than the content stored on the physical medium at the time of release.

Official updates and additional content released during the title's commercial life or subsequent period of official support should also be considered.

For some home video games, the final official state of the work was formed through post-release bug fixes, stability improvements, added functions, narrative supplementation, and additional content.

If these updates and additions are lost, preservation of the physical medium alone may not allow consumers to reproduce the final official environment that was historically available.

Where possible, the official re-release of a legacy title should therefore distinguish and preserve the following historically released states:

- the original release version contained on the physical medium;
- the final officially updated version; and
- a complete version containing previously released additional content.

Updates required for bug fixes, operational stability, and correct execution in current environments should, in principle, be included within the migrated digital entitlement.

Additional content that was originally sold separately may continue to be offered as separately paid content, subject to the existing rights position and original sales terms.

The foregoing concerns the preservation of versions and content that were actually released during the title's original commercial life or subsequent period of official support.

Separately, where digital migration under the framework reveals sufficient use, demand, willingness to pay, and commercial viability, the software rights holder may voluntarily choose to produce material that could not be implemented at the time of release because of schedule, budget, technical, or other constraints.

Such material could be offered as:

- newly produced additional content;
- a newly supplemented edition; or
- a reconstructed edition.

This would not impose any obligation on software rights holders to complete content that was not originally implemented.

Nor should it be treated as justification for releasing new titles in an incomplete state.

It would constitute a commercial option available where an existing work provides a basis for creating a new revenue opportunity with a narrower development scope and lower investment than a complete remake.

Any material produced at a later date must be clearly distinguished from:

- the original release version;
- the final officially updated version; and
- the complete version containing previously released additional content.

The date of production, the nature of the newly added material, and any changes from the original work should be disclosed to consumers.

Where practicable, consumers should be able to distinguish between and choose among the historically released versions and any newly supplemented or reconstructed version.

The framework could therefore serve two distinct purposes.

First, it could preserve historically existing official states of a work and maintain access to them as usable cultural assets.

Second, where demand and commercial viability have been demonstrated, it could provide a basis on which rights holders may consider completing omitted elements or revisiting parts of the original creative concept through clearly identified new production.

10. Industrial and Social Significance of the Proposal

This proposal does not oppose the discontinuation of physical media or the transition to digital distribution.

Nor does it require the manufacture, transportation, storage, and retail sale of physical media to continue indefinitely in the name of consumer protection.

Ending the supply of new physical media will not cause the consoles, software, peripherals, and used-game markets already circulating in society to disappear.

Without an official migration pathway, those assets may continue to exist as a legacy market disconnected from the official markets of platform operators and software rights holders.

Consumer demand may also continue to flow into external markets.

This proposal addresses that disconnection by providing a framework through which consumers may voluntarily migrate their physical game assets into official digital environments at a reasonable cost.

By granting one digital entitlement in exchange for collecting one physical medium, preventing duplication, and establishing official lending and transfer procedures, the framework would preserve as far as possible the functions of use, lending, gifting, and transfer that physical assets previously

possessed.

Digital migration could thereby be implemented not as a unilateral market change involving reduced consumer rights or repurchase of the same product, but as a fair asset transition connecting purchased assets to future-use environments.

From an industrial perspective, physical game assets circulating in used markets could be reconnected to official economic activity involving migration fees, revenue distribution to rights holders, intake services, entitlement transfers, and sales of related products.

The framework would also make demand for legacy titles visible and create evidence supporting rights clearance, backward compatibility, official emulation, porting, and re-release.

Rather than imposing a unilateral burden on a single party, the framework would provide rational incentives for consumers, platform operators, software rights holders, intake operators, used-game businesses, and recycling operators to participate.

From a social perspective, continuity of purchased assets, transparency of migration conditions, and voluntary consumer choice would prevent the costs associated with the end of physical media from being transferred entirely to consumers.

The framework could also shift competition between platform operators away from how much of the existing asset base they are able to abandon and towards how fairly and conveniently they allow consumers to carry that asset base forward.

Rendering collected media permanently non-circulable and recycling it wherever possible would connect digital migration with the circular economy.

Preserving legacy titles officially in versions materially equivalent to the original and maintaining them in executable form under modern conditions would also recognise video games not merely as obsolete commercial products, but as cultural works that should remain accessible to future generations.

This proposal does not require a choice between the physical and digital markets.

It provides a transition model for converting physical assets created in the past, relationships with existing consumers, the cultural value of legacy works, and existing distribution infrastructure into future revenue, customer continuity, circular use of resources, consumer protection, and stronger official services.

Where the transition from physical media to digital environments is unavoidable, it should not take the form of a market withdrawal that abandons existing assets.

It should be designed as a fair framework that reconciles consumer rights with the long-term sustainability of the industry.

11. Proponent

Gizmo Create LLC

This proposal was developed on the basis of practical experience in institutional design, operational design, organisational coordination, risk management, and information-system improvement in the fields of public administration, healthcare, social welfare, and disaster response.

For enquiries concerning the detailed framework or possible implementation methods, please contact:

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