

Section III The Value of Validity to the Cardholder

The Validity card is an enabler for a wide range of functions that provide direct benefits for the individual. These functions require accurate identification of the person and the confidence by the individual that his or her privacy is preserved in order to create the conditions for the emergence of the functions.

The collective effect of these enabled functions is substantial, by reducing costs to the individual, allowing access to a wider range of services and the streamlining of existing functions. Further, the introduction of niche services will minimise wastage in the economy, create improved products and at the same time meet social agendas such as energy preservation and environmental protection.

These enabled functions will be delivered by a large number of suppliers throughout the economy. The greater the number of enabled functions, the more the Validity card will be used and thus the greater the benefit to the individual (and revenues to SecurIBL), while the more Validity cards in use, the greater the value to suppliers of supplying Validity enabled function. Thus, there is a reinforcing loop effect – a classical case of increasing returns at work.

A range of the direct benefits of the Validity cards and the indirect benefits through enabled functions are listed below in related categories, as a sample of the value of the Validity card to the cardholder.

Direct Benefits

Card Features

Enabled Function: Single card replacing other cards

Benefit: The cardholder needs to carry only one card in his or her wallet. The replacement of a wide range of cards by a single card simplifies the use of card based services. This also reduces the number of cards that are replaced during an average month, reducing the complexity of managing one's wallet and the costs passed onto cardholders.

Enabled Function: Single card supplier

Benefit: If a wallet is lost or stolen, the cardholder has only one point of contact to advise to prevent the possibility of misuse of cards and to receive a replacement card.

Enabled Function: No external identification on card

Benefit: The absence of external identification on the Validity card protects the individual's identity. If a card being lost or stolen, then a person finding or stealing the card will not know the identity of the cardholder and thus not be able to use the card to steal the cardholder's identity.

Enabled Function: Stored photo

Benefit: Photographic identification is considered a superior form of identification to PINs or passwords by many service providers. The stored photo allows the cardholder to use the card for identity verification in a wider range of circumstances than a standard card.

Enabled Function: Stored password

Benefit: The cardholder can use a password to secretly enter identification information in a keypad using wordnumbers or by a keyboard, while shielding his or her password from the gaze of others. This password does not have to be revealed to the service provider's staff, thus enabling access to service without the necessity to reveal the identity of the cardholder to other people.

Enabled Function: Selected password

Benefit: The cardholder chooses their password themselves to store in the Validity card. This allows the cardholder to select a set of numbers, a phrase, word or combination that has some personal significance, thus simplifying the problem of remembering the password.

Enabled Function: Stored Biometrics

Benefit: The cardholder can use biometric information, such as retina scans, finger prints and DNA data, to access services and facilities with higher standards of security. The Validity card offers the cardholder the benefit of these facilities in a single card combined with the necessity to provide biometric data only once, rather than once per application.

Enabled Function: Validated Identity

Benefit: The Validity card requires a higher standard of proof of identity than typical cards before a Validity card is issued to a prospective cardholder. The issuing of a Validity card therefore provides a superior form of identification and thus conveys a higher level of status than typical cards.

Card Functions

Enabled Function: Double-blind system

Benefit: The Validity card enables a cardholder to access a service without the need to formally identify oneself. The double-blind capability has the benefit of enabling customers to access services while providing maximum protection for their privacy, as only the information required for service delivery is collected. This double-blind capability has particular advantages to any group eligible for targeted services based upon pre-determined criteria.

Enabled Function: Automated Service Delivery

Benefit: The Validity card enables the automation of service delivery to customers. The automated validation of identity enables services to be delivered while eliminating the need for the cardholder to have face-to-face contact with service delivery staff or other customers of the service. This benefit has particular importance when the service delivered carries a social stigma.

Enabled Function: Kiosk Service Delivery

Benefit: The Validity card enables the delivery of services from multiple function kiosks located in areas with public access. These kiosks can provide a wide range of services discretely to cardholders without the cardholder being required to visit the service provider's premises. The cardholder thus gains further protection for privacy.

Enabled Function: Handheld Access

Benefit: The cardholder can access services from handheld units operated by service providers. The Validity card thus enables remote service delivery using a wide range of handheld devices, thus providing access of services from temporary and/or mobile locations.

Enabled Function: Home Access

Benefit: The Validity card can access services from the security and convenience of one's home without incurring the cost and time to travel to a point of service. The cardholder can access remote services via a public network such as the Internet, while the Validity card can enable background verification of identity for the service provider. This capability has additional benefit in times of emergency when it may be difficult or impossible to directly access normally available services. Further, the home access can enable home-based services which can leverage off the identity of people in the home.

Enabled Function: Vehicle Access

Benefit: The Validity card can access services from vehicles using a combination of wireless data communications infrastructure and equipment fitted inside the vehicle. Further the Validity card can enable a range of vehicle specific services tailored to the cardholder's requirements.

Indirect Benefits

Transport

Enabled Function: Ticketing

Benefit: The Validity card enables electronic ticketing for a wide range of transport services, including ferries, aircraft, trains, coaches, buses and taxis. The Validity card enables the passenger to identify his- or herself as having the right to travel on the service, and provides a simple method to pay for the service. The passenger needs merely to present the Validity card to gain entry to the service, without the need for paper tickets.

Further, the Validity system enables customer seat allocation, by allowing the cardholder to specify preferences of location, service quality, proximity to other categories of passengers (e.g. a woman may prefer not to sit next to a man), co-seating with travelling companions and access to points of entry/exit. The seats can then be allocated to maximise the benefits from the passengers embarking upon the transport service.

Enabled Function: Baggage

Benefit: Baggage services can uniquely link each individual piece of baggage to each Validity cardholder. The cardholder can access the location and status of their baggage at each stage of their journey, thus providing peace of mind in the majority of cases and the ability to intervene in cases where baggage has been delayed or lost.

Further, the Validity service enables the cardholder to prove ownership of the baggage, thus simplifying the collection of baggage from the location's baggage collection point.

Enabled Function: Location Advice

Benefit: The Validity card can enable automated advice to transport operators of the cardholder's progress through the transport terminal to the transport service. This service can provide the cardholder with the best possible service from the transport operator, thus minimising the risk of missing transport links.

Further, the Validity card can enable priority queues for passengers embarking on transport services based upon time of departure, thus improving the service to the cardholder.

Enabled Function: Financial Information

Benefit: The Validity card services can link transport information into personal financial systems, thus simplifying personal financial management, taxation returns and the submission of expense claims to employers or other organisations. The cardholder can print or electronically submit forms in due course, either manually or automatically, to maximise their personal cash flows and minimise their taxation liabilities.

Vehicle Services

Enabled Function: Proof of Driver Status

Benefit: The Validity card enables the driver to prove his or her identity to authorities in case of a traffic violation or accident, or to gain access to services such as vehicle rentals. The Validity card can enable access to driver status information, such as licences held, disqualifications, penalties, experience, recent time or other limitations. Thus, the Validity card enables the replacement of the need to carry a separate card for proof of licence.

Further, the Validity service enables the cardholder to view the licence information, thus providing an up-to-date view of the cardholder's driver status.

Enabled Function: Proof of Vehicle Ownership

Benefit: The Validity card enables the driver to prove ownership of the vehicle as required by authorities. This proof can be in the nature of a yes or no response to a vehicle ownership enquiry by the authorities, thus preserving the identity of the vehicle owner if that is sufficient to meet the requirements of the situation.

Further, the Validity card enables proof of ownership as required to access services, such as insurance, or when selling a vehicle, where ownership is required to be proven or transferred as part of the service delivery or transaction.

Enabled Function: Personal Log

Benefit: Through validating the identity of the cardholder, the Validity card enables the logging of actual vehicle usage by each cardholder. Vehicle sensor data can be collected and allocated to each person in order to automatically generate accurate logs, in order to meet regulatory requirements for logbooks, taxation requirements for vehicle use and as inputs into personal logs as proof of experience.

Further, the Validity card enables a combined logbook based upon a person rather than upon a vehicle, thus enabling a true view of the cardholder's vehicle use across all vehicles driven. This information can assist a cardholder in providing their fitness to operate a vehicle in case of an incident or query by authorities.

The logbook can be printed or electronically submitted in required form to external authorities as required by regulation or operational purposes.

Enabled Function: Vehicle Log

Benefit: The Validity card enables vehicle logs to be maintained with driver information, to assist preventative maintenance planning for the vehicle and to trace the effects of differences in driver styles upon the vehicle.

Further, vehicle log enables reporting of total vehicle usage, including types of use, drivers, durations, fuel consumption and loadings. This data enables a more accurate view of the state of the vehicle and can be used by the cardholder as evidence in support of vehicle valuation for insurance and/or resell purposes.

Enabled Function: Maintenance Log

Benefit: Maintenance logs are enabled along with the other logging functions, allowing a complete history of vehicle components and their usage versus expected lifespan. The Validity cardholder can use this maintenance log to minimise the replacement of parts of the vehicle based upon actual life of the parts rather than vehicle life, thus reducing the cost of maintenance.

Further, the maintenance log provides proof of fitness of the vehicle for regulatory and other purposes, thus enabling the cardholder to prove the vehicle state in case of an incident or upon demand.

These logs thus contribute towards the vehicle's certification, which can be linked with the vehicle owner's Validity card to eliminate the need for separate certification papers or other forms of documentation.

Enabled Function: Financial Information

Benefit: The Validity card enables services to link vehicle information into personal financial systems, thus simplifying personal financial management, billing of customers, taxation returns and the submission of expense claims to employers or other organisations. The cardholder can print or electronically submit forms or invoices in due course, either personally or automatically, to maximise their personal cash flows and minimise their taxation liabilities.

In addition, the financial information and vehicle history enables the Validity cardholder to calculate the true costs of using different routes for the specific vehicle, thus enabling the selection of the optimal route in order to minimise the vehicle cost.

Enabled Function: Trip routing

Benefit: The Validity card enables collection of accurate current status of the alternative routes between a vehicle and its destination. This data can be collected from other Validity enabled vehicles, sensors along the routes and reports from external sources. This route information, coupled with the vehicle information collated for other purposes, enables the selection of the optimal route based upon time, fuel usage and/or financial cost, thus maximising the Validity cardholder's benefit from the trip.

Enabled Function: Road User Charges

Benefit: The Validity card enables personalised payment of charges based upon the driver rather than upon the vehicle. Charges such as road user charges, congestion taxes, tolls and other access charges can be automatically deducted from the cardholder's account without interfering with the journey. Thus, the vehicle owner gains the benefit of paying for their own trip only (rather than everybody else's use of the vehicle as well), while the cardholder gains privacy over the vehicle use and eliminates the inconvenience of being stopped for payment collection.

Enabled Function: Parking Charges

Benefit: The Validity card enables the booking of a parking space for a vehicle, with payment automatically deducted from a Validity-enabled account for the actual time used. Thus, the cardholder avoids the risk of being penalised for exceeding a pre-paid time period, while also eliminating the wastage of overpaying for unused time.

Enabled Function: Vehicle Immobilisation

Benefit: The Validity card enables the immobilisation of any vehicle unless operated by a pre-approved Validity cardholder. This capability enables the restriction of drivers able to use the vehicle, thus potentially reducing insurance costs by not covering higher risk drivers, and protecting the vehicle against theft. Thus, these services can reduce the costs of vehicle ownership to the cardholder.

Enabled Function: Emergency Service Despatch

Benefit: The Validity card enables the monitoring of the vehicle throughout its journey. If the system detects that the vehicle experiences high g forces, as typical in an accident, or is at an unusual angle, such as upside down, then the system can automatically attempt to contact the cardholder and, if no response is received, automatically relay the nature of the emergency, the condition of the vehicle, its location and the occupants to the emergency services. The timely intervention of emergency services can significantly improve the survival chances of the cardholder involved in an accident, and minimises the risk of an accident being undiscovered for a long period for time.

Enabled Function: Emergency Service Routing

Benefit: The Validity card enables the most efficient routing of emergency services to the vehicle's site, thus minimising the response time for an incident. The Validity system can advise other cardholders along an emergency service's route of the approach of the emergency service, in order to give them the opportunity to get clear and not impede the emergency service. Further, the Validity system can switch traffic control systems to favour the emergency service, thus speeding the response to the incident.

The result of these measures is that Validity enabled systems can significantly improve the response of emergency services to incidents, thus creating a safer environment for all cardholders and improving the survival chances of the occupants of the vehicle(s) directly involved in the incident.

Enabled Function: Vehicle Trace

Benefit: The Validity card enables the tracing of vehicles along their routes. A vehicle route may be traced if a vehicle is taken by an unauthorised person or stolen, and the vehicle immobilisation is either not active or has been deactivated by some manner. The vehicle trace provides the cardholder with an improved chance of having the vehicle returned, while the corresponding reduction of risk can result in reduced insurance costs.

Enabled Function: Energy Consumption

Benefit: The Validity card enables the monitoring of a vehicle's fuel usage and emissions under all conditions, including weather, driver style, vehicle state and routes taken. This information can be compiled into forms or reports to quantify the vehicle's performance against regulatory environmental and/or fuel usage restrictions. The cardholder gains the benefit of accurate information to enable continued use of a vehicle which might otherwise be condemned under a regulatory standard.

Further, the cardholder has the capability to provide energy and environmental impact reports, and the Validity system can use the information as inputs into personal accounting systems as part of carbon trading or other schemes.

In addition, the energy consumption of a vehicle can be used as part of the evidence for the energy and/or environmental footprint of a product or service, in support of marketing or regulatory programmes.

Home Services

Enabled Function: Occupancy Monitoring

Benefit: The Validity card enables the monitoring of the cardholder's home and all of its occupants. This capability enables a range of services tailored for individual occupant's requirements. Further, a Validity enabled system can detect non-occupants in the home and raise suitable alerts, thus improving security for the cardholder.

The monitoring of occupants is also useful in case of an incident. If an occupant assumes an unusual position for the location (e.g. after a fall) or calls for help, the system can alert emergency services of an incident. The monitoring of the premises also enables automatic calling of emergency services if smoke, fire or other threats are detected. The home monitoring enables rapid response for emergency services, while also providing information to enable them to account for all occupants. These measures all improve cardholder safety.

Enabled Function: Home Security

Benefit: Home monitoring includes the capability of security for Validity enabled systems. The space surrounding a home provides a detection zone that can be constantly monitored for unauthorised people approaching the premises. These approaches can trigger an alert to security services or warn the occupants of the approach of a person, depending upon system set-up and the circumstances.

Further, if the system detects an unauthorised person in the premises, then the system can proceed to a higher degree of alert, including alerting security services, enabling defensive measures such as locking the person in a room, enabling surveillance and alerting cardholder occupants.

Thus, a Validity enabled system has the ability to improve security of the home and the occupants within it.

Enabled Function: Home Management

Benefit: A Validity enabled home management system can be aware of the movement of the cardholder(s) around and throughout the premises. The system can automatically unlock doors in front of the cardholder and lock the doors after passage through the door. The system can restrict access to specific rooms to selected cardholders only.

A system can also manage lighting, air conditioning and heating in rooms. Lights, temperature and humidity levels can be set to personal preferences and can be switched on when a cardholder approaches a room and off after exiting.

Further, appliances (e.g. music systems, flat panel screens, coffee makers) can be preset to be turned on upon the approach of specific cardholders, based upon time of day, season or other criteria.

The combination of these systems can reduce the cost of home operations through minimising wastage, while improving the quality of the cardholder's life.

Enabled Function: Environment Management

Benefit: Validity card services can enable the monitoring of the environment of the premises. If the premises have surrounding land, then gardens, trees and lawns can be automatically monitored. The system can be preset to call for gardening services from pre-selected suppliers in case of plant growth beyond boundaries, soil conditions outside pre-set requirements or damage to the environment.

Likewise, if the premises have a pool, then pool conditions can be monitored and pool maintenance called in response to preset conditions.

Further, the use of the surrounding area can be monitored and access restricted to authorised cardholders, thus enabling, for example, control of child access to pools.

Enabled Function: Utility Services

Benefit: The Validity card system can enable the monitoring of the use of all utilities, including electricity, gas, water, sewage and similar services. Meter information can be automatically relayed to utilities to enable their billing for services.

The metering capability eliminates the need for the utilities to send personnel to the premises to physically read meters, thus improving the security of the premises and protecting the occupants' privacy.

Further, automated meter reading is less costly for utilities than manual meter reading, thus enabling the cardholder to receive more cost-effective utility services.

Enabled Function: Automated Shopping

Benefit: The Validity system can monitor the use of household supplies, such as standard food items, laundry, hygiene products and consumables. Automated shopping systems can be pre-set to periodically order supplies to be delivered from local suppliers to the premises at a time when an occupant is present, without the need for human intervention.

This system can ensure standard items are always available, thus reducing the time required by the cardholder to monitor household stocks of basic items and eliminating the inconvenience of unexpectedly running out of some item.

The system can also monitor household items for generating shopping lists for people who prefer the personal experience of shopping.

Enabled Function: Automated Goods Receipt

Benefit: The Validity system can automatically receive goods in a receiving area. Shipping invoices can be electronically transferred for comparison against goods received, or paper copies received for manual comparison by the occupants. The goods receiving system can monitor time of receipt and delivery agent, in case the shipment is incomplete and evidence is required to support a claim for compensation.

Further, the financial information accompanying the received goods can be transferred into personal accounting systems, thus enabling improved personal accounts and potentially reduced taxation liabilities.

Enabled Function: Billing

Benefit: The Validity system enables billing of occupants on the basis of the time spent in the premises – which is particularly relevant in boarding houses and temporary accommodation, as well as commercial space such as serviced offices, etc. – thus enabling more cost-effective use of the premises for cardholders.

Further, portions of the premises may be billed against business activities, thus enabling more sophisticated accounts that can be used to reduce taxation liabilities.

Personal Safety

Enabled Function: Medical Help

Benefit: The Validity card can enable rapid access by medical staff to critical medical information. If the cardholder is incapacitated for any reason, there is the possibility that medical staff will administer medication or conduct a treatment that has serious unintended consequences for the cardholder.

Further, an important procedure may require approval by a next-of-kin before medical staff will conduct the treatment, in order to satisfy cultural objections to treatment, minimise legal liability or to ensure payment for service. The Validity card can provide immediate access to the individual, saving valuable time for gaining approvals.

Thus, timely availability of critical medical and next-of-kin information can significantly improve the cardholder's position in case medical help is required.

Enabled Function: Distress Call

Benefit: The Validity card can enable an automated distress call where a person is acting unusually for the location or has been subjected to unusual conditions (e.g. moving between different heights at free fall speeds). The distress call system can enable a call from help from other Validity cardholders in the near vicinity and from emergency services.

This capability provides additional protection for the cardholder, by enabling rapid intervention in case of an accident or the onset of an incapacitating condition.

Personal Validation

Enabled Function: Location

Benefit: The Validity card can enable the monitoring of the cardholder's location at all times. If a cardholder finds that he or she has been accused of an act by an authority and has no alibi, then the Validity-enabled system can provide verified evidence of the cardholder's actual location at the times in question.

This information can protect the cardholder from miscarriages of justice, thus proving a valuable safeguard of personal liberty.

Enabled Function: Personal Log

Benefit: The Validity card can enable the storing of video and audio of the cardholder's surrounds as part of a personal log. This information can be used for personal purposes (e.g. diary), as evidence in case the cardholder is accused of any act or as information of the situations confronted by the cardholder.

Investments

Enabled Function: Online Investment Market

Benefit: The Validity card provides proof of identity to support the cardholder in accessing online investment markets to trade in a wide variety of equities. The lower listing and transaction costs of these online markets enable greater liquidity than traditional share markets, while also enabling much smaller and more diverse investment opportunities – resulting in a much larger number of investment options.

The Validity system supports online investment markets penetrating the small and medium sized business sectors, with individual projects and small entities comprising the bulk of the investment portfolio.

The cardholder has access to high performing investment options and greater diversity of portfolio, at a lower overall cost than traditional investment channels.

Enabled Function: Project Capital

Benefit: The Validity card enabled markets enable the cardholder to structure a project into an investment vehicle and to offer the project to investors on the online investment markets.

The cardholder gains access to capital at reasonable cost and without the complications of traditional sharemarket offerings. This service capability provides the cardholder with the ability to follow their own aspirations, to live their dream and to take advantage of personal insight for personal gain.

Thus, the cardholder gains the capacity to create substantial personal wealth if the project proves successful.

Currency

Enabled Function: Exchange

Benefit: The Validity card enables transfers between local currencies and an online trading currency. The exchange enables cardholders to pre-pay for listed goods and services from any location, regardless of the domestic currency of the seller, and vice-versa for selling goods.

Further, the exchange of currency for the online trading currency provides a universal measure of value of specified goods and services, thus providing an alternative to traditional markets for measuring wealth.

Enabled Function: Transfer

Benefit: The Validity card enables transfers between local currencies using the online trading currency as an intermediate step. This service enables cardholders to move wealth to other cardholders without relying on the traditional international banking system.

This service has the additional benefit of minimising the disruption to legitimate transfers of wealth from Government regulations relating to money laundering and terrorism, which have distorted money flows without consideration of the impact on innocent parties.

Marketplace

Enabled Function: Product Catalogue

Benefit: The Validity card enables cardholders to safely participate in online markets. Sellers can list their products on online catalogues with prices denominated in the online trading currency. Purchasers can select products based upon pricing, availability, delivery costs and personal preference. The product catalogue provides greater variety of products than standard retail options and the purchaser with more choice of suppliers, while at the same time exposing the seller to a larger market for his or her products.

A second benefit is that the product catalogue enables cardholders to purchase directly from manufacturers and shipped directly from regionally based warehouses. The product catalogue bypasses the need for traditional retail distribution systems, thus eliminating a substantial cost in accessing products. Thus, Validity enables the cardholder to purchase product at lower prices than through traditional channels.

Enabled Function: Guaranteed Transaction

Benefit: The Validity card enables a guaranteed payment system for goods and services. Traditional online payment systems, such as credit cards, ensure payment is received by a Supplier, but provide the Purchaser with no guarantee that the product will actually be shipped. In cases where trade is across international borders, Purchasers often have no recourse to any remedy beyond trying to get their credit card provider to reverse payment for goods that are not received

The Validity enabled system releases payment to Suppliers upon lodgement of shipping documents (thus assuring shipment by the Supplier) and requires pre-payment by the Purchaser (thus assuring payment by the Purchaser). Thus, the Validity enabled system is positioned as the trusted intermediary who can ensure that the transaction is honoured.

Enabled Function: Ratings

Benefit: The Validity card enables a rating for every transaction. Purchasers can rate Suppliers upon the performance of their side of the transaction and vice-versa. These ratings are anonymised to protect the privacy of the rating party and the statistics of all ratings made available to other Purchasers and Suppliers intending to deal with the original parties.

The rating system encourages good behaviour by all parties, as a bad rating can affect reputations - potentially leading to discriminatory pricing of products and refusals to trade against offenders.

The rating system provides the cardholder with additional information upon which to judge their purchase and sales decisions.

Enabled Function: Niche Products

Benefit: The Validity card enabled catalogue provides a market for the emergence of products exploiting smaller niches than currently economically viable. Further, the closer contact of producer and customer provides the ability for greater contact, including requests for differentiated product varieties suitable for new niches or communication about actual product performance.

The consequence is that the cardholder can expect access to products that more and more closely fulfil the cardholder's actual requirements rather than general market conditions, thus lowering costs by avoiding paying for unnecessary features and greater utility by accessing features not otherwise available.

Employment

Enabled Function: Online Labour Market

Benefit: The Validity card enables online labour markets for cardholders to offer their time and skill in response to specific projects rather than the traditional contract of employment. These projects would typically be limited in time and scope, thus allowing the cardholder to retain flexibility in hours worked and control over personal commitments. The market logs the person performing the task and pays the person based upon the agreed rates upon performance of the task.

The online labour market also rates skills of people by qualifications and ratings on actual projects performed. Project offerors can select the preferred person for the job, using ratings as a guide to the person's suitability. The person responding to a project offer places their identifier against the project in order to bid for the work. The online labour market provides the administration of all payments, taxes and legal requirements for the project.

The cardholder gains the benefits of flexible working opportunities and of access to labour for specific projects, enabling the cardholder to focus on creating wealth in areas of expertise and getting more skilful people for other activities.

Enabled Function: Flexibility

Benefit: The Validity card enabled online labour market provides cardholders flexible working hours, the ability to take unlimited time between projects, the ability to work only when desired and in many cases the ability to work to provide services anywhere in the world from one's one location.

The cardholder thus gains control over life and can select the ideal work/life balance for their circumstances.

Enabled Function: Intellectual Property

Benefit: The Validity card enabled online labour market provides protection for personal intellectual property (IP), compared to traditional job markets where an employer has automatic default rights to intellectual property created during the period of employment, whether at the place of employment or not.

The IP management system enables IP to be leveraged through licensing arrangements, allowing cardholders to gain a return from the use of their IP. Further, the automated nature of the IP management system ensures that IP fees can be economically collected from all cardholders accessing the IP, thus allowing lower IP fees than traditional methods.

The cardholder gains the benefit of being able to realise returns from their IP and establishing a lifestyle based upon IP creation.

Manufacturing

Enabled Function: Flexible Manufacturing

Benefit: The Validity card enables the introduction of new flexible manufacturing technologies, to enable small-scale one-off manufacturing of a wide range of products.

Flexible small-scale manufacturing systems can provide niche products at competitive pricing for the market. IP is accessed online and designs downloaded into flexible manufacturing plants to produce products based upon the design. Licence fees are then paid for each use of the design.

More complex products are produced by a wide range of flexible manufacturing plants producing components that are then assembled into the final product.

The cardholder gains the benefit of access to products using more economical methods, leveraging smaller niches and using newer IP than traditional products.

Enabled Function: Cottage Industries

Benefit: The Validity card enabled labour market, online marketplace, flexible manufacturing and IP management system provide the essential components for the emergence of cottage industries to cater for niche markets. More complex products can be produced by cottage industries cooperating by producing components for the assembly by another cottage industry. The flexibility of cottage industry and their ability to make rapid use of developing IP creates a competitive advantage against large-scale business, thus changing the layout of the economy.

The cardholder gains the benefits of the option of running a cottage industry leveraging off personal expertise and located in their own area and access to a widening array of niche products produced by these cottage industries.

Enabled Function: Supply Chain Management

Benefit: The Validity card enabled system can manage all of the stages along the supply chain required to produce a product for a customer. The collection of information at each stage enables accurate calculation of costs, labour used, value created by location, energy consumed, resources used, environmental cost and the duration of the processes. This supply chain management enables calculations of true costs and the variation of the supply chain.

The cardholder benefit is better information for making decisions regarding different products and access to better managed supply chains, which can be expected to become more efficient and thus produce more competitively priced products.

Social Services

Enabled Function: Medical

Benefit: The Validity card provides medical professionals access to critical medical information in a timely fashion, in order to ensure appropriate treatment for the patient. In addition, next-of-kin information enables rapid communication with a cardholder who can provide permission for medical procedures necessary for the well-being of the patient.

Further, the Validity card enables protection of medical information. The information can be collected for ownership by the individual rather than the medical provider, thus providing the cardholder with copyright over the information about their medical conditions. This copyright provides a legal protection against misuse of the records, while the Validity card manages access to protect privacy and only allows access in cases where permission has been approved by the cardholder (or in cases of incapacity, the cardholder's next-of-kin).

The cardholder gains the benefits of rights over his or her information and the protection that the information will not be misused to deny the cardholder medical insurance or other services.

Enabled Function: Welfare

Benefit: The Validity card enables cardholders to apply anonymously for welfare, and for their eligibility for welfare to be judged objectively rather than the subjective methods often employed by welfare agency staff. The cardholder has the ability to apply remotely, thus avoiding any stigma from seeking eligible support.

Further, the Validity Card ensures that the identity of the recipients is not necessary for the welfare agency, only their eligibility. This double-blind capability provides the opportunity to better meet welfare policy objectives without loss of privacy by beneficiaries.

Enabled Function: Education

Benefit: The Validity card enables cardholders to apply for education based upon eligibility and background, without the need to disclose identity.

Enabled Function: Subsidies

Benefit: The Validity card enables cardholders to access eligible subsidies based upon criteria, rather than knowledge of the subsidy system. The cardholder can gain the subsidy benefits that are available without the administrative difficulties or requiring the gatekeepers normally associated with subsidy schemes.

Society Governance

Enabled Function: e-Voting

Benefit: The Validity card enables cardholders to be correctly identified and verified for their right to vote in elections. The Validity card enables electronic voting from any device accessible to the Validity service. The inexpensive and widespread availability of this service enables a wider participation of voters in public decision-making, leading to greater emphasis on referenda.

The cardholder can equally exercise voting rights from the comfort of their home, vehicle, a remote destination or from a polling booth.

Enabled Function: Empowerment

Benefit: The Validity card enabled voting system enables greater participation in the governance of society by reducing costs and simplifying the process. These changes provide the catalyst for more responsive governance by elected representatives and for greater decision-making by voters in general.

Further, the devolved responsibility can also be applied to the commercial sector, where greater participation by people in the operation of their economic sector can be expected as a result of changes in economic realities.

Thus, the cardholder has the opportunity to participate more fully in the direction of society.

Enabled Function: Open Monitoring

Benefit: The Validity card enables open monitoring of society governance decisions and the actual costs and benefits of those decisions. The performance of decisions can thus be judged objectively and the decision-makers held to account.

The cardholder can expect more transparent governance as a consequence of this open monitoring capability.

Enabled Function: Justice

Benefit: The Validity card enables more open application of justice to resolve disputes and simplifies the giving of evidence in cases before tribunals and courts. The decisions from cases will be incorporated into administrative systems, thus ensuring that legal precedent is followed and the law is implemented, avoiding future potential legal issues.

The cardholder can expect that justice will become more easily available and more open than previously.