Implementing an innovation strategy in WCO; responding to disruptive events

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Abstract

Innovation is how organisations develop solutions to meet new challenges. The task involves recombining existing and new elements and capabilities to serve a new objective, frequently in new and evolving contexts. While recognising and acknowledging the work done by the World Customs Organization (WCO) in setting international standards, fostering international cooperation, and delivering capacity building, this article argues that new contexts and new opportunities frequently arise from crisis scenarios. The context for international organisations has been evolving in recent years, and COVID-19 could be an accelerator of these changes. The WCO, like many other international organisations, faces new challenges in an environment of uncertainty, and the way to stay relevant is through innovation. This article proposes a set of practical tools and steps towards implementing innovation processes in the WCO that can result in the creation of value for its Members and the Secretariat.

COVID-19 global impact and Customs response

COVID-19 is a health crisis that has forced governments across the world to completely shut down many productive sectors. Travel has practically ground to a halt, and trade and mobility have been deeply impacted. This is one of the worst health emergencies of our times and, although its economic impact still cannot be fully measured at the time of writing, it will be greater than that of any other previous crisis on record. Constraints and confinement measures taken by governments have been essential in slowing down the spread of the disease and in reducing the number of lives lost, but have resulted in profound economic consequences.

The scope and the duration of the COVID-19 outbreak remains unknown, but according to the Organisation for Economic Co-operation and Development (OECD 2020, p. 12) ‘The global economy is now experiencing the deepest recession since the Great Depression in the 1930s, with GDP declines of more than 20 per cent in many countries during shutdowns and a surge in unemployment’. The World Trade Organization (WTO) forecasts world merchandise trade will decrease between 13 per cent and 32 per cent in 2020 due to the COVID-19 pandemic.

The post-COVID-19 economy will depend on the decisions that economic actors and governments take in the months following the start of the pandemic. Maintaining trade flows as much as possible has been crucial in providing access to essential food and medical items and in limiting negative economic impacts.

Governments, business, and society have understood the importance of finding the means to continue operating throughout the pandemic and this has accelerated existing trends such as teleworking, e-commerce and automation. In the cross-border trade and customs arena this is reflected in the need...
to continue the international flow of goods by strengthening global value chains, seeking paperless and automated customs systems, and promoting coordinated border management and international Customs-to-Customs cooperation.

The pandemic has not only accelerated some existing trends, it has also cast out any doubt about the importance of international cooperation and coordination as the only way to overcome a global crisis such as the one the world is currently facing. COVID-19 has shown that no country can fight alone against this crisis, giving multilateralism another opportunity to rise as the system to be pursued by governments and the way of interacting in their international relationships.

During the pandemic, many countries unilaterally opted to restrict exports of essential goods and medical supplies. Although these measures may, in the short-term, have provided some benefits to the countries implementing them, by securing the supply of essential goods and medical equipment and thus reducing the spread of the disease, in the medium and long-term, these measures undermined the global fight against the spread of the virus.

Countries realised that, by imposing such restrictions, other countries would respond with reciprocal measures, which in the end would result in a worsening of the crisis by limiting access to essential goods. In some cases, restriction measures were imposed on imports of goods from places that were being heavily impacted by the disease, which also impacted global value chains. In the long run, key actors, and decision-makers, must make cross-border trade and the smooth flow of legal goods a priority in the strategy to combat the negative effects of the pandemic.

Global crises require global answers and, despite recent voices raising concerns about the usefulness of multilateralism, traditionally international organisations have been successful in providing appropriate platforms to shape and coordinate global actions. In the face of the COVID-19 challenge, countries, and governments again turned to international organisations to ensure a certain level of consistency and harmonisation in the approach taken towards the pandemic.

The revindication of multilateralism will not be easy; the process of opening again seems slow and is presenting more uncertainties than assurances, and economic perspectives also remain uncertain. As countries have started to get the health emergency under control, they have begun to lift their lockdowns, as we have seen initially in China and Europe, but recently we have also seen the number of new COVID-19 cases begin to increase. Restrictive policies must gradually be lifted; however, some countries will keep their international borders closed for some time trying to avoid a second wave of spread.

Moreover, the lack of tangible results in long-disputed matters within the United Nations (UN), together with criticism regarding the World Health Organization’s actions during the pandemic and the recent crisis within World Trade Organization operational bodies, makes the future of multilateralism even more complex. The World Customs Organization, as part of the multilateralism system, has had, and will continue to have, a key role in providing stakeholders with post-pandemic answers.

International organisations need to innovate to deliver practical, functional, and tangible results. In many cases, this means that they need to reinvent themselves by introducing new strategies that allow them to provide value to their members. The WCO is no exception and needs to further increase its shift from theory to action, and from being reactive to being proactive. Crises, such as COVID-19, come with many threats, but it is our responsibility to also identify opportunities.
WCO response to COVID-19

Throughout the crisis, international organisations played a major role in supporting and guiding governments and stakeholders. During the pandemic, the WCO took the lead and was one of the first international organisations to react to the emergency by quickly setting up a dedicated web page containing important communications and updates on COVID-19. Among others, the WCO has published information regarding the use of related WCO tools, and has also provided a Harmonized System (HS) Classification reference document on COVID-19 medical supplies to help countries in their fight against the spread of the virus. Members have also been asked to provide information on challenges and best practices to prevent the spread of the infection and to facilitate the flow of essential goods, and a depository of this information has been published for the public to consult.

The WCO Secretariat immediately began liaising with the WHO to properly inform WCO Members about the situation, enabling them to be involved in national response strategies. To send coherent messages to businesses and ensure a coordinated approach to border management, close collaboration was also strengthened with other international organisations, such as the WTO, the International Maritime Organization (IMO), the International Chamber of Commerce (ICC), the International Road Union (IRU), and the Universal Postal Union (UPU), among others. This was especially highlighted by the development of a COVID-19 Trade Facilitation Repository, together with the WTO, the United Nations Conference on Trade and Development (UNCTAD), the Commonwealth Small States Office (CSSO), the Global Alliance for Trade Facilitation (GATF), the International Air Transport Association (IATA) and the International Trade Centre (ITC), a platform that consolidates the initiatives on trade facilitation adopted by organisations and stakeholders, once again demonstrating that global challenges are better addressed through globally coordinated responses.

Collaboration with different stakeholders has been a fundamental part of the strategy followed by the WCO. Collaboration with its Private Sector Consultative Group (PSCG) has been enriching. During the pandemic, the Secretary-General and the Deputy Secretary General met with the PSCG on a weekly basis to hear and understand the private sector perspective and the impact of the different cross-border measures that had been taken, thus allowing the Secretariat to propose actions in response to these impacts.

Regardless of the global solidarity and benevolence shown in times of crisis, criminals often try to benefit from these situations. Customs administrations reported and publicised many seizures of counterfeit critical medical supplies, such as face masks and hand sanitisers. The WCO launched the Intellectual Property Rights (IPR) CENcomm Group as a means of permanent and real-time exchange of relevant information to fight these criminal activities. The customs community responded in this manner to expectations related to its essential security role, preventing suspicious and potentially harmful goods from entering the legal market.

Regarding its function to provide technical assistance, guidance, and leadership to Member administrations, the WCO is enhancing its delivery model of remote/virtual capacity-building where possible as part of a blended approach, together with face-to-face initiatives once travel is allowed.

The crisis has not yet ended, but some lessons can already be learned. Customs administrations reacted in different ways to the challenges of the pandemic. There was no single globally coordinated answer, but some of the measures implemented were successful in achieving the continuity of flows of essential goods. If there had been a more coordinated effort based on a plan devised in advance, the impact may have been smaller. A plan that considers the effective flow of essential goods through facilitation measures and exchange of information among customs administrations, together with provisions to strengthen supply chains and risk management, could be in place. Furthermore, if these trade facilitation
measures are extended beyond the COVID-19 crisis, they may have global impacts on recovery efforts. As such, the WCO should seek to maintain the political willingness and commitment of countries to implement permanent reforms.

So far, the WCO has done a great job in developing international standards, delivering capacity building, and serving as a vehicle for Customs-to-Customs cooperation; however, the context is changing. COVID-19 has accelerated this change by bringing higher levels of economic, social, and political uncertainty. Other international organisations (some with greater political influence) are turning to the customs field for opportunities to grasp benefits. Members are asking for more products and services, while resources are not increasing. Customs administrations are often not leading, or participating in, the process of developing national strategies because Customs’ role lacks visibility in the higher spheres of public bureaucracies; generally speaking, societies are not familiar with customs duties and responsibilities, and customs officers are often regarded as the ‘bad guys’.

Despite everything, another aspect highlighted by COVID-19 is the importance of Customs and its role in legal trade facilitation. This opens an opportunity to introduce new methods and ideas. To benefit from such opportunities, customs administrations need to strengthen their collaboration and the WCO needs to innovate and produce additional value for its Members.

**Reasons to innovate**

As stated, crises like the one the world is facing in 2020 have a significant impact on social and economic life. This is usually in the form of disruption of several processes or paradigms that create opportunities. History suggests that organisations that invest in innovation throughout a crisis outperform peers during the recovery; Bar Am et al. (2020) observed that organisations that maintained their innovation focus throughout the 2009 financial crisis emerged stronger, outperforming the market average by more than 30 per cent, and continued to deliver accelerated growth over the subsequent years.

Through surveys and interviews, Bar Am et al. (2020) found that in many cases the natural response to the current crisis was to deprioritise innovation and concentrate more on shoring up core business, pursuing known opportunities, conserving cash and minimizing risk while waiting for times of more clarity and less uncertainty. They defined these measures as a limited response to a crisis, and highlighted other urgent actions such as:

1. adapting the core to meet shifting customer needs
2. identifying and quickly addressing new opportunities being created by the changing landscape
3. re-evaluating the innovation initiative portfolio and ensuring resources are allocated appropriately
4. building the foundation for post-crisis growth to remain competitive in the recovery period.

Businesses and institutions may not be able to continue performing as well as they have in the past by just replicating the same actions. The future we encounter may significantly differ from the present and past. This applies to international organisations as well. In the case of the WCO, shifts in Members’ needs, the use of technology, other international organisations entering the ‘customs market’, and ever-changing political and economic contexts, among other risk factors, present new opportunities. Innovating is a move towards grasping these opportunities.

There are many definitions of innovation; it is not just a new idea, a new product or service, or a new technology. An idea itself is not innovation, rather innovation needs to be understood as a process. Usually ideas are incomplete, they need to be built upon with complementary procedures and interaction with
different social contexts. Innovation can be seen as a set of routines or procedures that an organisation carries out to create and collect aggregated value (Pisano, 2015).

It is commonly said that the number of registered patents is considered a good way to measure innovation; however, the fact of having patented a product or service does not mean it is useful. Jackson (2011) used a case study based on mousetraps to illustrate the gap between ideas and impact. The case study showed that more than 4,400 patents for better mousetraps had been awarded in the US, but less than 30 were commercially successful.

The question that needs to be asked is: why innovate? The answer is clear: the reason behind innovation is the creation of value.

According to Ventresca (2020), an organisation innovates for one of the following three reasons, or a combination of them:

1. Competition: in the case of international organisations, for a long time the prevailing approach was that there was no competition. There was an assumption that each international organisation had clear boundaries within its sector. This created a very stable environment in which international organisations could develop their business models and serve members.

   It can be argued that this assumption no longer holds, creating a dynamic environment that is constantly changing and in which there are threats of new entrants to the customs arena. While the WCO is the only international organisation 100 per cent focused on customs matters, it is now facing competition from other organisations such as the World Bank, the International Monetary Fund (IMF), UNCTAD, the United Nations Office on Drugs and Crime (UNODC), the WTO, and the OECD, among others. Innovation will allow the WCO to gain the competitive advantage needed to succeed in this restless environment.

2. New business models: technology has recently become a strong source of innovation, especially by developing new business models. It is a particularly important part in most innovation processes; however, is not the only factor. Technology by itself does not create value; it must be considered together with other social interactions and external inputs. The WCO needs to reconfigure its business model to better leverage the use of technology.

   The use of data analytics for risk assessment or other decision-making procedures, or the use of videoconferencing to deliver training, are just some examples of available technologies that can be better used within WCO processes.

3. New ways of creating value: the appearance of new platforms is forcing many economic actors to rethink their processes to create value. A platform is defined as a common hub that creates a new system to coordinate the way services are delivered, extracting some of this value for itself (Teece, 2017). Examples such as Amazon, Airbnb or Uber are examples of such platforms that coordinate services, provide customers with experiences, and manage relations with regulators.

   The WCO could create its own platform to coordinate services provided to Members on the one hand, and to manage relations with stakeholders, such as other border agencies, on the other. A platform that orchestrates services provided by many international organisations could be another interesting initiative in the future.

Whatever the reason to innovate, the goal is to create value. What worked yesterday may no longer work tomorrow. A new idea could be the beginning of innovation but is not ‘innovation’. Rather, innovation refers to the process of developing ideas, managing how to create value through these ideas, and then capturing the value created.

The WCO needs to determine how to define value from a customs perspective for its Members and for
the organisation itself. Predetermined conceptions of value can evolve over time and the development of standards, fostering of cooperation and delivery of capacity-building functions need to adapt to these changes to consistently align with the creation of value that Members are seeking. Value for the WCO should be understood as the way to assist and guide Members towards a harmonised customs environment that positively impacts in global economic development, protection of society and fair revenue collection systems.

**Innovation strategy**

Historically, the world has never undergone quite so much change as it is now experiencing. There have been long periods of a stable economic context. This ecosystem has allowed international organisations to focus on exploiting their existing capabilities. Maximising the value created by their existing resources and pursuing operational efficiencies is known as ‘exploit mode’ (March (1991) and Ventresca (2020)).

With a constantly evolving environment, exploiting current resources is not a successful long-term strategy. International organisations need to identify opportunities for future success, i.e. ‘explore mode’ (March (1991) and Ventresca (2020)).

The combination of the time and resources that organisations should spend on each mode is something that needs to be discussed and agreed with Members. How much of our present efforts should be directed towards obtaining current value, and how much should be focused on identifying and planning for new sources of value? The resulting equilibrium is called the ‘exploit-explore ratio’, as illustrated in Figure 1.

*Figure 1: The exploit-explore ratio at any point in time*

![Figure 1: The exploit-explore ratio at any point in time](image)

Source: Adapted from The Oxford Strategic Innovation Programme (Ventresca, 2020)

In the case of the WCO, the current Strategic Plan 2019–2022 presents a complete shift from the previous versions in how the WCO is carrying out its processes. With the application of the Balanced Scorecard Methodology, the identification of strategic processes within one of the strategy’s dimensions acknowledges the importance given to the exploit mode as shown in Figure 2.
The WCO’s strategic map 2019–2022

At the same time, the WCO’s Strategic Map takes into consideration the ‘explore mode’ when talking about organisational needs to be developed to improve such processes.

To engage in the explore mode, existing processes need to be discarded and new processes need to be put in place (Pisano, 2015). The new procedures must give room to developing ideas and opportunities. This needs to be embedded in the core of the organisation, together with a culture that embraces risk-taking with a purpose. Although a new and more inclusive process was implemented through the realisation of six regional consultations, the WCO’s Strategic Plan still needs to be aligned with the environmental scan and appropriate action plans. There is clarity in the Internal Processes perspective, which would mean that the exploit mode is being prioritised (this is in line with the Strategic Plan cost allocation), but concrete actions and processes need to be implemented to ensure the objectives in the Learning and Development (L&D) perspective are met.

During these consultations, Members decided to place the use of technology, the need for research and analysis, and raising the profile of the WCO and promoting Customs’ role, in the L&D perspective, which means these are the areas in which the WCO needs to put in place new processes and invest resources in line with the explore mode.

An important change in WCO Strategic Planning is the introduction of managing it as a continuous process. This is relevant because Members and the Secretariat need to understand that it is natural to have a strategy that is evolving, considering internal or external changes. Throughout the current crisis this has been clearer than ever since priorities are changing, the context is constantly changing, and the way of approaching different challenges is also changing. The WCO’s Strategic Planning Cycle
provides the much-needed flexibility for the strategy and, together with the new monitoring tool on the implementation of the Strategic Plan, creates enough space to adapt the strategy (Figure 3). This flexibility is also key in developing an innovation culture within the organization.

Figure 3: Strategic planning cycle


The ‘explore mode’ needs to implement innovation processes that focus on trying to identify new opportunities to create value by developing the use of new technologies, drawing up new research papers and analysis, and creating new ways of promoting the role of Customs. All these will occur in a new dynamic post-COVID-19 context which will demand a different and specific set of skills and organisational capabilities.

The aim is to reach the right balance between the ‘exploit’ and ‘explore’ modes and to create enough value today by perfecting the operation of the organisation, but to also have enough resources to devote to experimenting with new ideas and developing services that create value in emerging trends. This could be achieved by a better linkage between the Strategic Plan and the WCO’s Environmental Scan.

Junni et al. (2015) propose a mix of structure and culture within an organisation to build capacity for innovation. They present a framework that organisations can use to balance their exploit-explore ratio considering three main categories:

1. Human resource management. Human resource practices should support the organisation’s capability to do both: exploit and explore. Policies should be in place to motivate staff to pursue innovative behaviours and management to promote leadership by measuring their performance associated with innovative practices.

2. Organisational structure. The structure of the organisation needs to facilitate the exploit and explore activities in the right way by separating its different units according to their goals and functions.

3. The organisation’s culture should promote shared values and sustain social networks to enable collaboration and exploration tasks.
In the first category, the WCO needs to work on a solid human resources policy. A range of processes needs to be underscored so that talent, attention and expertise can be shaped adequately through standardised hiring and selection processes, a well-established reward system, coherent, updated and clear job designs, and the arrangement of teams with complementary skills.

In the structural category, the WCO’s structure needs to define which activities are linked and how information should flow between the different units, who makes decisions and on what terms, and who is accountable to whom and in what manner. Evidence suggests that features such as collaboration, decentralised decision-making and intrinsic incentive schemes are key in promoting innovation.

Changing an organisation’s structure or processes alone will not change how people interact within it or how different routines can be linked. This requires a deep change in the culture of the organisation. Culture needs to reinforce the commitment to experimenting, exploring and learning new ways of doing things. Features such as failure tolerance, experimentation, open communication and non-hierarchical or flat structures often promote innovative cultures.

**Types of innovation**

Organisations are established in a way that allows them to do what they excel at. Best practices and the routines that accompany them form part of an organisation’s structure and strategy. In other words, organisations are built around routines, and these routines are built into sets of tasks and activities that are difficult to change. Usually, innovation goes against these existing successful routines.

Innovation is built upon procedures and routines which fit best within the strategy of the organisation. Depending on the type of innovation that the organisation is seeking, changes and adjustments need to be made to the strategy. Teece (1986) summarises the types of innovation as:

1. **Product and service innovation:** this is the most common type of innovation. Usually it is about exploiting current capabilities or procedures by increasing the volume of production or finding cost efficiencies. This type of innovation usually produces an immediate and short-lived impact and is better implemented when markets and ecosystems are stable.

2. **Business model innovation:** this type of innovation has become more frequent since the launch of the Internet. It focuses on creating new activities, creating a link between existing activities, or changing areas that perform certain tasks with the purpose of outperforming competitors. The creation of digital platforms is currently a common tool of business model innovation.

3. **System-level innovation:** this type of innovation considers a broader sectorial or societal reordering. It usually starts in an individual process and in how it interacts with other processes, or in other words, a part of the system that influences other parts of the system.

An example of innovation for the WCO at the product-service level would be to find efficiencies in the process of developing standards and guidelines or including a new component that could add value for Members when delivering capacity building or technical assistance. This would be in line with exploiting the current resources and capabilities through operational efficiencies.

As a business model innovation, the WCO could explore new ways of doing things and creating additional value in its current deliverables. An example that could help illustrate this is migrating from the current traditional face-to-face method of delivering capacity building to online delivery. This uses the opportunities created by the available technology in the market. Online meetings and the use of videoconferencing solutions is another way to innovate at the business model level and is something that has been implemented due to COVID-19. A platform to share information that results in value to Members is another way of innovating.
Regarding system-level innovation, the WCO could think of an innovative process that disrupts the environment in which international organisations operate. This could involve creating value in new ways not seen before, for instance, by implementing specific activities to assist Members, or carrying out actions that will impact the system in which customs administrations work.

Systemic innovation might better enable a consistent impact but usually is regarded as a more radical change and faces stronger cultural resistance; however, it can be obtained as a result of other innovations at the product or service and/or business model levels that can work as enablers. Moving innovation from one type to another could be regarded as more of a linear progression than a radical change, smoothing the organisation’s adaptation process.

### Organising for innovation

Innovation does not just happen; it is something an organisation must work for. Innovation is complex and needs to be placed at the core of an organisation, together with processes that structure and encourage it.

De Jong et al. (2015) performed a multi-year study comprising interviews, workshops and surveys involving over 2,500 executives and more than 300 companies in a broad set of sectors and countries, and found that eight essential attributes were present, fully or partially, in every case that presented a higher performance due to innovation. They summarised these eight attributes as follows:

1. **Aspire.** Accept innovation to grow or stay relevant and establish targets to reflect this.
2. **Choose.** Invest enough time and resources in a measured risk portfolio of initiatives.
3. **Discover.** Find insights into what matters to stakeholders and understand the impact of these changing needs. This attribute could also be called ‘rediscover’ since the environment is frequently changing.
4. **Evolve.** Create robust and scalable new business models that provide sustainability and resilience to the organisation.
5. **Accelerate.** Outperform competition with faster and more effective ways of identifying, implementing, and capturing value.
6. **Scale.** Launch innovations in relevant ways to stakeholders, in the right volume and at the right time.
7. **Extend.** Create and capitalise on alliances and partnerships. Create new external networks that provide additional value to the organisation’s outcomes.
8. **Mobilise.** People within the organisation must be motivated, compensated and organised to innovate repeatedly.

The study shows that a comprehensive system or set of routines based on these eight essential attributes has a strong positive correlation between innovation performance and economic performance. Mastering at least five out of these eight attributes already demonstrates this result, which is improved even more when at least seven attributes are implemented.

An assessment of these attributes within the WCO reveals the following, as outlined in Figure 4.
The ways in which organisations structure and allocate their activities and resources are important when they are striving to innovate. It is not uncommon to see innovation run counter to an organisation’s successful practices. As we saw before, it is desirable to find a balance in the exploit-explore modes to be successful. Tushman et al. (1996) define this balance as organisational ambidexterity which is defined as the ability to simultaneously pursue both incremental and discontinuous innovation, hosting multiple contradictory structures, processes, and cultures within the same organisation.

Meyer (2014) presents an extensive literature review on the matter and proposes to analyse four levels that help measure an organisation’s capacity to create and innovate: Organisation, Management, Staff, and Environment (OMSE). I will refer to these four levels as the OMSE framework which can be used as a toolkit to build capacity for innovation. The four levels of the OMSE can then be associated with 110 main categories and can help examine its components and interactions in relation to innovation and can help assess the eight essential attributes mentioned above. At the four-level dimension, the OMSE framework refers to the following:

- **Organisation**: this refers to how the strategy and plans are formulated to pursue innovation. The goals established in the mission and vision statements as well as other overriding factors such as convictions and values.
• Management: This refers to the structure of the organisation and the capabilities that this arrangement provides. Processes and activities interact to encourage the innovation process; specific processes that help generate ideas, develop them, assess them, and implement them in a way that expands their value. The type of leadership and management that allows for creativity and the granting of resources.

• Staff: this considers people’s diversity and inclusion. It incorporates the different roles and backgrounds of employees. This is directly impacted by the organisation’s recruitment and selection policy, as well as the way people are managed.

• Environment: this refers to the organisation’s culture and its shared values and social norms within the organisation. It refers to how communication is promoted, the risk-taking culture and how the climate in the work environment is perceived.

The way in which these four elements are designed and reinforce each other enables an organisation to build its capacity to innovate. Applying the OMSE framework to optimise the way the WCO approaches these elements is another way of helping identify actions that can lead to innovation (Figure 5).

**Figure 5: OMSE Framework applied to the WCO**

<table>
<thead>
<tr>
<th>Organisation: update and adapt the strategy and routines that aim to come up with new ideas and ways to create value</th>
<th>Management: Rethink the structure so that it becomes a more horizontal and less hierarchical organisation to provide the capability for innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WCO Innovation</strong></td>
<td><strong>Staff: Establish a human resources policy as a core part of the strategy, developing specific profiles and positions that support the innovation process</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Environment: Change defined values that point towards more risk taking and produce an environment in which to create</strong></td>
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**The innovation process**

There are different ways of organising for innovation, taking as a basis the OMSE framework and the eight essential attributes. The way an organisation structures its processes and resources might impact on innovation, by either promoting and supporting it, or blocking it.

A decision needs to be taken on how to shape the innovation process, and how to merge it with the ongoing activities and existing resources. This decision needs to be reflected in the Strategic Plan.

An innovation strategy should determine what types of innovation should be pursued. It should also align activities in relation to core innovation goals and the key competitive advantage that the company is trying to gain. A vital element in this strategy is the relationship between creating and capturing new value.
Value creation can be defined as the degree to which final users believe they have gained value from a product or service. Value capture refers to the reward or profit that the organisation gets back from the final user (Verdin & Tackx, 2015). In other words, the more the WCO provides value to its Members, the more they will trust and engage with the organisation.

Well-established organisations can capture value for a long period without being innovative or creating new value because they have been leaders in a specific market and have been maximising their operational resources. However, in a dynamic and unsettled environment, such as a post-crisis situation, competition increases, and this value is almost certainly impacted negatively. As a result, organisations face a scenario that requires a deep strategic transformation towards innovation and value creation.

When the external context changes, the products or services provided by an organisation may no longer be relevant. For a long-term solution, organisations need to find ways to innovate and sustainably create value. Despite the desire to find new ways of creating values, many institutions fail. Besides following and aligning the right elements in the organisation (based on the OMSE framework or the eight essential attributes presented before), according to Pisano (2015) leadership needs to also consider:

1. What type of value from innovation is being pursued? This could be either economic or social benefit, for instance.
2. How will value be captured from innovation? What will be the competitive advantage that could differentiate the organisation from the rest?
3. What kind of innovation will create and capture value: product or service, business model or systems innovation?
4. How should resources be allocated to the different goals identified?

The answer to these questions needs to come from the strategy. One way to approach these dilemmas is to use the innovation strategy map (Table 1) which categorises innovation in the following three areas (Pisano, 2015):

1. degree of innovation (routine or radical)
2. locus of innovation (component or architectural)
3. source of value (core innovation or complementary assets).

Table 1: The WCO current innovation strategy map

<table>
<thead>
<tr>
<th>WCO current innovation strategy map</th>
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<tbody>
<tr>
<td><strong>Degree of Innovation</strong></td>
<td>Currently more focused on routine innovations. Working groups are trying to find improvements in existing products, for example RKC\textsuperscript{13} Comprehensive Review, HS Review and SAFE Framework of Standards update, among others.</td>
</tr>
<tr>
<td><strong>Locus of Innovation</strong></td>
<td>We can find more innovation in components or parts of the process delivered by the WCO than in architectural matters. Discussion is starting on updating rules of procedure and other governance issues, but it appears difficult to make radical changes to founding instruments.</td>
</tr>
<tr>
<td><strong>Source of Innovation</strong></td>
<td>Lately more focused on complementary assets, for example, the WCO has been directing efforts towards complementing the implementation and use of the WTO’s TFA\textsuperscript{14}</td>
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</table>
An organisation can find a balance between each of these categories. The WCO is not necessarily always focused on routine, component, and complementary innovation; at certain times and in certain processes it can interact as well with radical, architectural and core innovation. However, the above analysis currently seems to be the most representative one.

This is no surprise since the priorities established by the Members in the 2019–2022 Strategic Plan reflect the organisation’s current routines, processes, and tasks.

Any change to the strategy would require the WCO to reconfigure the roles, business systems and relationships that value creation is based on. The challenge lies in how to align the innovation strategy with the elements of the OMSE Framework and how to organise value-creation activities in ways to support such a strategy.

This challenge can be addressed by implementing the innovation value chain. In common strategy-based perspectives, the competitive advantage of any organisation is conceptualised under the value-chain model. The main imperative is to make sure that the organisation is delivering value at the correct process along the chain. Hansen and Birkinshaw (2007) introduce the innovation value chain to align innovation with the strategy by introducing the concepts of value creation and value capture.

The innovation value chain is inspired by the traditional strategy-based concept of value chains. The traditional value chain divides the activities of an institution into support activities (research, human resources, technology and other) and primary activities (those directly involved in the physical development and distribution of a product or service such as operations, logistics, sales, and other). Both sets of activities produce value and should be organised in a way that optimises competitive advantage (Porter, 2001, pp. 50–66).

As mentioned, an innovative organisation is not just one that has good ideas or invents new things. An innovative organisation is one with the capacity to create and capture new value, and this requires alignment between the organisation’s innovation strategy and its innovation process or innovation value chain.

The innovation value chain requires organisations to meet the dual strategic imperatives of value creation and value capture by describing three integrated processes in innovation:

1. generating new ideas
2. converting good ideas into value-generating outcomes (value creation)
3. deriving benefits from new products or services, business models or systems (value capture).

These three processes are separate but interdependent. If they do not recognise this interconnection, organisations may never capture the full value or impact of innovation. To establish an innovation value chain, the WCO could follow the steps illustrated in Figure 6.
Figure 6: Steps towards an innovation value chain

- **Generation of ideas**
  - Often result from collaboration across different units
  - The WCO needs to strengthen transversal coordination and communication. Avoid working in silos.

- **Value Creation**
  - The WCO requires organisational processes such as screening, funding, development and testing of prototypes.

- **Value Capture**
  - Supportive decision-making process and funding.

*Source: Created by the author and adapted from Hansen and Birkinshaw (2007)*

Leadership commitment and understanding of the innovation cycle is vital in all three stages. In terms of organisational structure, a division of labour that is set up for the work that the WCO has historically done is not necessarily going to be effective in moving new ideas through the value chain to facilitate innovation in the organisation under the new conditions following COVID-19.

The design of the division of labour needs to allow the WCO to innovate consistently and routinely. It should reflect the strategic imperatives of the organisation and could even be based on a distributed regional system.

The organisation should be open to discussing old ideas and connecting them with new ways, places, and combinations to implement them. All these activities must be framed under an innovation system that enables the practical implementation of a strategically aligned innovation value chain. The system must be understood as a set of processes and structures that prescribe how the WCO searches for ideas and creates and captures value.

**Implementation of innovation**

Introducing innovation and change can be incredibly tough, but it can also be equally rewarding in bringing together like-minded people and turning today’s ideas into tomorrow’s reality.

Different models exist to implement or operationalise an innovation strategy and innovation value chain. Three approaches can be assessed to determine which one would be the more suitable for the WCO depending on its Members’ decision: Stage-Gate Systems, Agile Models, and Open Innovation Models, as follows:

1. **Stage-Gate Systems**: these divide the innovation process into different work tasks, from idea generation to implementation and post-implementation (Cooper, 1990). Stage-Gate Systems divide the process into stages, and each stage is more costly, risky, and resource-intensive than the previous one. In this type of system, each work stage is followed by a ‘gate’ or quality control activity. At each stage, a certain component of innovative work is added and at each gate a review is performed. If this is not passed, the next stage cannot start.
2. Agile Model: essentially, this is a more flexible, iterative, and interactive process that follows six steps (Rigby et al., 2016):
   a. A small, cross-functional, and self-managed team is created with a team leader
   b. The team develops ideas and leadership ranks in terms of financial feasibility and value to stakeholders
   c. The team breaks up the top-priority tasks and works on these over short periods of time
   d. The team convenes daily to resolve problems and report progress
   e. Products are tested, feedback is implemented immediately
   f. Once each priority is complete, the next one is tackled.

3. Open Innovation: this method represents a shift away from the traditionally closed and closely guarded innovation process. It involves a transfer of expertise, skills, and knowledge beyond the organisation itself (Chesbrough, 2003).

Some of the implications and conditions that need to be considered when deciding the approach to take towards implementing the innovation value chain are shown in Table 2.

Table 2: Implications and conditions to consider when implementing innovation

<table>
<thead>
<tr>
<th>Approach</th>
<th>Implications</th>
<th>Strength</th>
<th>Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage-Gate Systems</td>
<td>Organisation is divided into project teams and senior managers are required to act as gatekeepers for all projects.</td>
<td>A rational approach based on incremental improvements and evidence-based decision-making. Minimises risk. Useful in incremental or component innovation.</td>
<td>Useful in predictable innovation scenarios, not for coping with uncertainty and the current fast-paced conditions. Not much flexibility.</td>
</tr>
<tr>
<td>Agile Model</td>
<td>Cross-functional team totally dedicated to the innovation process. Strong leadership with an understanding of the innovation process is needed.</td>
<td>Allows creativity and responses to new information. Accelerates the process of innovation by performing tests after each short sprint. Works best for complex problems in turbulent environments.</td>
<td>A very self-directed process which limits the participation of people outside the small group. External context is not always considered. Needs frequent testing of improvement, access to final users.</td>
</tr>
<tr>
<td>Open Innovation</td>
<td>Develop capabilities to engage with external information and sources of insight. Collaborate with external people and other institutions.</td>
<td>Takes into consideration the external context and can base its core work on independent research units. When a trend or threat is poorly understood by the internal structures, this approach allows organisations to notice signs of forthcoming changes.</td>
<td>Could involve more complex governance arrangements such as joint ventures, Memorandum of Understanding (MoU) or other type of agreement that can make the process slow and limited.</td>
</tr>
</tbody>
</table>
To consider which type of innovation approach is better for the WCO, the WCO Council would need to discuss in detail each approach’s strengths and weaknesses, and the organisational implications. Each of these alternatives requires organisational reforms and has funding implications that need to be analysed.

**Drivers of innovation**

Innovation is a complex process, driven by different influences and sources. Several models are used to determine what drives innovation in an organisation.

Innovation is commonly linked with technology solutions, but it can also be driven by several other different factors. According to Schumpeter (1942) innovation leads to gales of ‘creative destruction’, as innovation causes incumbent ways of doing things (supply chains, governance forms, technologies of capabilities) to become obsolete and supplants them with new ways, developments, capabilities and structures. This model works at a broad level where new technologies and associated complementary activities create and destroy existing structures.

According to Geroski (2003), the supply of innovative offerings drives the evolution of new markets. He argues that supply drives new markets and that demand is initially inchoate or without a form; hence, demand in new markets awaits a dominant design with specific features and attributes. This is known as the supply-push innovation model.

Geroski (2003) also introduces the demand-pull model. This model begins with the assumption of demand from existing customers. In this case, final users can specify demand beyond their current experience of a product or service offering and thus play an important role in driving innovation.

As mentioned before, technology is another common driver of innovation. A way of understanding the dynamics of technology that shape innovation is through S-curves (Foster, 1986). Tushman et al. (1996) state that there is a pattern that describes evolution of innovation and organisational growth. S-curves can be used to describe this pattern as the performance of an innovation or a technology over time combined with Anderson and Tushman’s (1990) four eras: Discontinuity, Ferment, Dominant Design, and Incremental Improvement. Basically, the four eras suggest that when a new technology or innovation emerges, there is a period of ferment which is mainly characterised by low performance and limited access. After this, a dominant design emerges which is followed by incremental changes that improve its attributes and efficiencies. Finally, a new product arises which produces an era of discontinuity and starts the cycle again. This trend can be reflected in an S-curve (Figure 7).

*Figure 7: Performance over time of an established product compared to a new one*

![Figure 7](source: Created by the author and adapted from Anderson and Tushman (1990))
Figure 7 shows how, if an established product or service remains in a state of exploit mode (incremental improvements), a new entrant will eventually overtake its performance space. However, if the established product or service focuses on the explore mode, it is possible to outperform the new entrant.

It is important to consider that, while technology can have an important role in innovation, innovation itself does not rely on technological advances. Disruption too often overvalues the role of technology; however, technology alone cannot achieve anything. Technology provides opportunities which can have an impact depending on how they are used, and on the building of sociotechnical systems.

Another common driver of innovation is the final user. The user-driven innovation model is also a recent approach. This model puts the end user at the centre of innovation. The process of designing and creating new services and products starts from a clear understanding of the user’s needs. In this model it is important to put in place mechanisms that help the organisation predict what the end user will need in the future.

The WCO could take a combined approach. Since its relationship with final users (Members) is close, they need to be placed at the centre of innovation processes. Members are usually engaged during the whole process of developing standards or creating new structures so they can heavily influence the process in both the supply-push and the demand-pull models. On the other hand, the Secretariat also has a privileged perspective on matters around the world, and its staff is usually extremely prepared to engage in innovation processes independently.

The use of technology is key in an innovation process in which the WCO might engage in the future; however, this is not the only component of innovation. Value from innovation is created by combining organisational competencies, technologies, and Member inputs. The WCO’s Single Window tool is a clear example of a well-established platform that creates value to Members and gives customs administrations a leading role when implemented and it is now in many countries going through incremental changes. According to the performance over time of an established product, the Single Window might soon face the threat of new entrants; thus, Members and the Secretariat need to work together to create a new ecosystem to improve the WCO’s creation and capture of value.

**Leadership and innovation**

As stated before, for innovation to be successful and part of the core functions of an organisation, leadership must strongly support and understand the process. Leadership is not only found in top management; it is also found in other groups and possibly in the culture of the organisation itself.

According to Bolman and Deal (2017), there are three ways in which we can conceptualise organisations and the way they work. These are linked to the way they implement leadership and the way innovation can be engaged. The three main concepts are:

1. **Structural or design view.** The key is to design the right practices and processes in a routine. It works almost automatically, and the results of innovation are trusted in this way of performing. It is based on rationality and practice.

2. **Contested arenas.** These are organisations with certain unwritten rules, where resources and relationships are a key factor of leadership. This is a more political model that considers groups of people and coalitions that can agree or disagree in many matters but in the end are productive.

3. **Cultural view.** Organisations are places where meaning is made, where people perceive and make sense of things. Identity, roles, and organisational culture are key factors to consider.

These three views can provide important insights to help determine an action plan that considers critical activities to get things done and to implement innovation in the WCO.
The design view can provide insights into how the hierarchy is working and the nature of the decision process. This is the most common way to look at an organisation.

Contested arenas add to the classic design view. In terms of a contested arenas view, it would be helpful to determine: who is the dominant coalition? What are the key resources? How are internal conflicts being solved in a regular way?

Finally, if we take the third view, in cultural terms we should determine what the dominant meanings are within the organisation. How do we interpret things and what is the nature of the organisation: ‘We are all customs officers, so we think in terms of Customs.’ This is the dominant logic of the view of how we do things in the WCO, and it is important to understand it. It is important to consider that across Members we can find differentiated customs functions, spanning from security to facilitation of trade-focused approaches. These differences might orient the organisation’s culture and shed light on the way people interpret their role as well as the type of leadership needed to carry out innovation strategies.

For each of these views, Bolman and Deal (2017) state that a characteristic set of leadership and managerial skills is needed, as shown in Table 3:

Table 3: The type of leadership needed in different concepts of organisations

<table>
<thead>
<tr>
<th>Concept of organisation</th>
<th>Type of leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural or Design</td>
<td>Leaders are the architect. The leadership builds the infrastructure, creates rules, determines hierarchy, and evaluates the decision process.</td>
</tr>
<tr>
<td>Contested arenas</td>
<td>Leaders are basically brokers. The leadership works among people and different coalitions, builds new coalitions, and negotiates ideas. The leadership works out the rules of the game and changes them when necessary.</td>
</tr>
<tr>
<td>Cultural</td>
<td>Leaders have a more inspirational role. A leader is considered a wise person, someone who stands between the everyday tasks of the organisation and the wider, transcendent values.</td>
</tr>
</tbody>
</table>

**Conclusion**

The COVID-19 crisis is challenging the world. Governments and international organisations are no exception. The WCO has a clear mandate to assist, guide and provide leadership and, as part of this multilateral system, needs to find new ways of serving its Members.

Customs has been at the forefront of the response of governments to this crisis. Supporting global value chains by securing the flow of essential goods, while fighting and detecting illegal operations, has been fundamental in overcoming the crisis. The WCO has been at the forefront of this effort and has provided its Members and the global community with relevant information and a set of best practices and recommendations that have helped relieve the impact of the pandemic.

Nevertheless, there is more that can be done, and the future is uncertain. The ‘new normal’ is still to be defined and the WCO not only needs to adapt to the new reality but, in some cases, needs to lead it. One way of doing this is by implementing an innovation strategy.

There are many challenges ahead of us: as explained, organisations set routines to repeat what they do best, and changing these processes is costly and time-consuming. This confronts us with the challenge of overcoming inertia, to convince employees and Members that a new way can be established.
How can we inject the organisation with sufficient innovation to add value for customs administrations? This paper follows a methodical approach to innovation in the WCO that should start with the definition of the next 2022–2025 Environmental Scan and Strategic Plan.

The strategy must answer why we want to innovate and how we want to focus our resources to reach the proper balance between the exploit and explore ratio.

The strategy needs to determine within its priorities what type of innovation we want to pursue: service, business model or system? It also needs to perform an assessment of the capabilities we currently have and what we are lacking, and to establish concrete actions to acquire them if needed. By using the OMSE framework, we can align the structure of the organisation to the desired objectives set out in the strategy.

The Strategic Plan 2022–2025 needs to be better linked with the Environmental Scan to better identify current trends, opportunities, and threats, and establish concrete actions with concrete deliverables for customs administrations. In other words, the Strategic Plan should not only consider how we can be better in what we are currently doing, but also establish a clear innovation strategy map which identifies the degree, locus, and source of innovation. Members and the Secretariat need to follow a coordinated planning approach which considers innovation strategies that can help in crisis management and business continuity scenarios.

Once the Strategic Plan has been agreed by WCO Members, through the consultation process, an innovation value chain needs to be put in place. This innovation value chain should seek to generate good ideas, create value for Members through the implementation of these ideas, and capture value for the WCO itself through more engagement and trust from its Members.

The innovation value chain must be implemented through either a stage-gate system, an agile model, or an open innovation model. Potentially, this requires discussion of an internal reform and the reallocation of working areas to achieve more transversal collaboration and to avoid working in silos.

Discussion is needed of how the Secretariat’s unilateral efforts can be incorporated, together with Members’ synergies and contributions from other stakeholders. Engagement with stakeholders can be a central part of the strategy towards a more cooperative one. This approach might help overcome the risk of falling into a competition logic and instead finding strategic alliances that can help WCO differentiate and become more visible. Leadership throughout the process is important and a specific set of skills will be truly relevant for the process to succeed.

The ultimate reason for innovating is to create new forms of value. Some initial ideas of how to create value that could be adopted by the WCO are to:

a) engage, adopt, and recombine technologies and procedures

b) strengthen Member engagement through communication, coordination, and inclusiveness

c) seek alliances or partnerships with other international organisations

d) connect and experiment with other stakeholders

e) engage and promote regulatory change.

Value is created only when ideas are implemented, and the outcomes of innovation are measurable. New sources and concepts of value arise frequently, for instance, millennials and Generation Z consider concepts such as environmental matters, cyber security, and happiness to be higher priorities than they were for previous generations. A strategy that places people and employees in the centre, seeking sustainability linked to the UN’s Sustainable Development Goals could be attempted. The WCO needs to anticipate these trends and start a process of adopting these new forms of value at the same time as it engages in current global discussions.
The use of IT solutions is common in innovation processes. Digital economies are transforming life through better services, and by solving structural problems. By digitising services, governments can meet public expectations and become more efficient. The WCO can foster automation and the modernisation of customs procedures using new technologies. Many other international organisations may also be thinking this. In this competitive environment, the usual process of collecting best practices and developing guidelines could work, but will this work model be sustainable? Is the WCO ready to compete with other international organisations that have greater political influence? The answer is probably not for long. The customs community is facing challenging times and, to overcome them, we need to innovate and raise Customs’ awareness by keeping the WCO relevant.

References


Notes

2 www.wto.org/english/news_e/pr855_e.htm
7 www.tfafacility.org/covid19-trade-facilitation
10 The new monitoring tool is reserved for Member access only.
13 Revised Kyoto Convention
14 Trade Facilitation Agreement

Ricardo Treviño Chapa

Ricardo Treviño Chapa has 20 years of experience in the public sector. He served as Mexico’s Director General of Customs and after being elected by the WCO Council, in 2018 he took over the position of Deputy Secretary General. He led the change on the methodology and definition of the Organization’s current Strategic Plan and is currently monitoring its implementation. He is in charge of updating the WCO environmental scan every year and will start the process of aligning and linking this scan to the next Strategic Plan including its strategic goals, priorities and deliverables.
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