STRATEGIC COMMUNICATION DURING THE INFLATION CRISIS

An Analysis Based on the Strategic Communication Framework

modernstats

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Contents

Acronyms / Abbreviations

AMA	Ask Me Anything
BLS	U.S. Bureau of Labour Statistics
BPS	Badan Pusat Statistik (Statistics Indonesia)
CES	Conference of European Statisticians
CPI	Consumer Price Index
CSO	Central Statistics Office
CSSA	Committee of Coordination of Statistical Activities
ESA 2010	European System of National and Regional Accounts
ESAC	European Statistical Advisory Committee
EU	European Union
FAQ	Frequently Asked Questions
FBI	Federal Bureau of Investigations
HICP	Harmonised Index of Consumer Prices
INE	Instituto Nacional de Estatística (Statistics Portugal)
INSEE	Institut national de la statistique et des études économiques (National Institute of Statistics and Economic Studies)
Istat	Istituto nazionale di statistica (National Institute of Statistics of Italy)
NSO	National Statistical Office
NSS	National Statistical System
ONS	Office for National Statistics
PR	Public Relations
Q&A	Questions and Answers
SCF	Strategic Communication Framework
SEO	Search Engine Optimization
UN	United Nations
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme

Key Messages

- The inflation crisis highlighted the importance of the strong connection between statistical production and communication. Price statistics are a regular product with a long history of communication. Amidst these “routine” releases, it can be easy to miss the chance when a situation starts escalating and the communication strategy needs to be shifted. Therefore, it is important to have a process whereby the statistical production experts can alert communication experts on any major developments, and the communication experts can ask questions about any issues which they spot in releases.
- There is a growing responsibility for statistical organisations to be aware of what is in the public discourse and to provide insights and context where appropriate.
- Any crisis situation can be turned into an opportunity. With heightened interest in price data, statistical organisations can engage with citizens who may not normally be aware of these organisations and the data which they produce. It is important to leverage this opportunity, not only to explain particular issues, but also to be transparent and draw attention to the professional independence and other fundamental principles of official statistics, where relevant.
- Given that the topic of inflation is closely related to the daily lives of the public, it is particularly important to adapt the content strategy accordingly, such as by conveying messages with empathy and making the statistics more relevant for individuals. Catchy visual products, short explanatory videos, and fictional characters or personas can also improve consumer price index (CPI) literacy and user engagement.
- Knowing the users and their characteristics and needs enables the statistical organisations to use the different channels and tools to deliver the “right” message to the “right” user.
- Traditional and digital tools give a lot of flexibility to statistical organisations to deliver a message to different user groups. However, it is important to keep in mind that communication professionals are the key figures in developing and orchestrating communication strategies and campaigns. The success of a statistical product depends equally on scientifically sound methodology and the proper communication of this to users.

1. Introduction

Background

Just as the world was recovering from the global COVID-19 pandemic, it was swept by an inflation crisis affecting numerous countries and millions of people, with the 2022 annual rate reaching 9.2 per cent in EU region and 7.5 per cent worldwide. This inflation crisis has sparked a widespread interest in inflation and price data. People have increasingly sought to understand how the official price statistics headlining media reports have been obtained and why these figures have become so high, or they have sometimes simply been unhappy with the data.

As the primary producers of official statistics on the various social, economic, and environmental aspects of a country, national statistical organisations (NSOs) have a long history of disseminating and communicating data. The statistics on price and inflation have historically been among the most prominent products of statistical organisations; hence, there has been a considerable amount of experience and expertise amassed. However, the communication of price statistics amidst the inflation crisis has been challenging for several reasons.

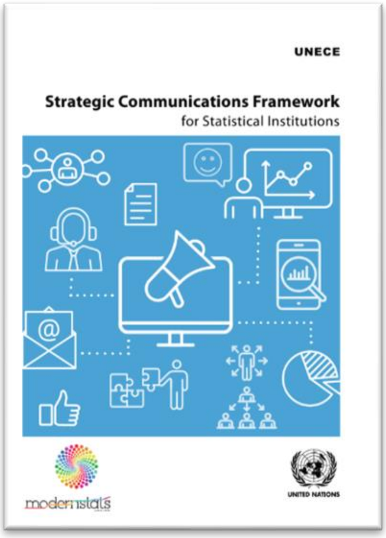
Foremost among these reasons is that the topic is very close to the everyday life of people. While some data from statistical organisations measure aspects relevant to certain industries/sectors or life stages, the increase in prices is a phenomenon that affects the lives of people in a very tangible way. The headline inflation rate is based on various factors, but many individuals have felt that the official numbers have not reflected the economic hardships that they have been experiencing. Researchers have questioned the way in which numbers have been calculated, which has fuelled scepticism about the accuracy and relevance of the official statistics.

The fact that inflation is closely related to the everyday life of people has also made the topic highly politicised. Inflation is among the statistical indicators that are particularly prone to politicisation. For the general public, inflation is a major concern, as it has a big impact on their economic conditions and financial well-being. According to a Gallup poll from 2021, 45% of Americans reported financial hardship triggered by increased prices, meaning that increased prices had an influence on voter sentiment. Different political factions have interpreted and used the data to support their agendas, raised questions about the objectivity of statistical organisations when the data did not fit a certain agenda, and at times even used data from sources that were not necessarily verifiable and reliable. The increasing influence of social media and digital platforms in the past decade has exacerbated the spread of misinformation and disinformation about inflation.

Finally, given the heightened interest in inflation, users who typically had not interacted with NSOs had a need for clear, simple explanations of methods and background. The effective communication of statistics involves not only presenting the numbers but also providing explanations and necessary background information, such as the methodology. The CPI is calculated based on a range of factors (for more on this, see Section 2). While the statistical organisations have always made their methodology transparent, the way it was communicated might have been more suited to experts rather than the general public, whose interest has been heightened due to the crisis, but which requires more simple and relatable explanations.

The Strategic Communication Framework

The Strategic Communication Framework for Statistical Institutions (SCF), developed by the High-Level Group for the Modernisation of Official Statistics from 2018 to 2019, provides guidance to support statistical organisations in developing communications strategies which are aligned with the values and principles that underpin official statistics.



Source: https://unece.org/statistics/publications/strategic-communication-framework-statistical-institutions

This report is based on case studies from statistical organisations regarding the challenges related to communicating price statistics during the global inflation crisis. It is structured following the main elements outlined in the SCF (corresponding to sections 3 to 7), namely values and principles, environmental scan, communication objectives, audience segmentation, communications channels, and content strategy. The report provides a comprehensive analysis of what should be taken into consideration for the strategic communication of price statistics during the inflation crisis. The report provides an example of a practical application of the framework, that is how statistical organisations can use the framework to consider their communications strategies in other statistics. The strategies and actions taken from statistical organisations are presented in the report's sections to provide concrete examples. The full case studies can be found in Annex 1.

2. Consumer Price Index

What is the CPI?

The CPI is a monthly indicator that summarises the evolution of prices in an economy, as it measures the evolution of the prices of a basket (updated regularly) of goods and services that represent the structure of monetary expenditure for final consumption by households/families living in a country[1].

Before the start of each year, the sample of goods and services can be updated, so new goods and services that have gained in significance can be added, and goods and services that are no longer representative can be excluded. An inflation indicator measures the additional expenditure which one has to make to maintain the consumption basket of the pre-defined or base period. It is an index number based on 100 (reference period = 100). The index number is a simplified measure that shows the variation between a value and a reference point. In the case of the CPI, the reference value is assumed to be 100. The base value of index numbers is always identified in the statistics (e.g. “2012=100” means that 100 is the value observed in 2012. In general, the index base/reference period is updated every 3-5 years. But the time series extends before this point.). The value of the index number at a given time indicates the direction of the change: if it is greater than 100, the value is greater than the base, meaning an increase; if it is less than 100, the value is less than the base, so there has been a decrease. Subtracting 100 from the index number gives the percentage rate of change. The index number therefore immediately reveals how far a value is from the base.

The CPI is thus not an indicator of price levels but a summary indicator of the variation in consumer prices over time.

Consumer prices correspond to the amount paid by households to purchase individual goods and services based on monetary transactions. This amount includes all indirect taxes net of subsidies on products, rebates, and discounts, as long as they apply across the board to consumers, and it excludes interest and other costs associated with buying on credit. Consumer prices are therefore an indicator of how much consumers pay when they buy a good or service. Such goods and services include items that consumers frequently purchase, such as food and fuel. They also include less frequently purchased items, such as household appliances and airline tickets.

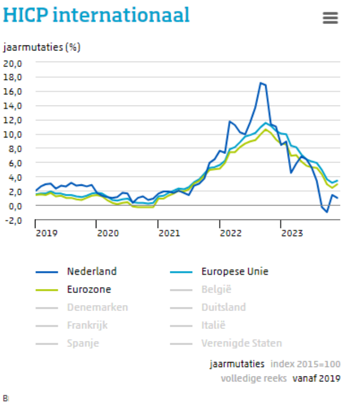
What is the CPI used for?

The CPI is a fundamental statistical operation for decision-making, economic calculations, and the formation of expectations by economic agents. In addition to this generalised interest, it is also important for national, international, and regional economic and social policy authorities. It should be noted that the value obtained in December from the CPI (the average rate of change over the last twelve months, which compares the level of the average index over the

[1] The Consumer Price Index Manual: Concepts and Methods is used by countries and provides an overview of the methods and practices national statistical offices (NSOs) should consider when making decisions on how to deal with the various problems in the compilation of a CPI.

last twelve months with the immediately preceding twelve months) has been used as a reference indicator in social dialogue and is therefore associated with the average annual inflation rate.

In this sense, it should be mentioned that the CPI is a key indicator used in setting the monetary policy, it is formally provided for in many contracts and administrative and judicial provisions, and it is used in the formation and updating of prices, namely rents, salaries, pensions, user charges, tuition fees, and expropriations.



Source: https://www.cbs.nl/nl-nl/visualisaties/dashboard-consumentenprijzen

In the European Union, the [harmonised indices of consumer prices](#) (HICPs) are calculated according to harmonised definitions as defined in binding EU regulations, and therefore provide the best statistical basis for international comparisons of consumer price inflation between the EU Member States. Eurostat publishes HICP data at European Union, euro area and EU Member State levels, as well as for EFTA countries.

The HICP for the euro area is the key indicator of price stability recognised by the European Central Bank and the European System of Central Banks.

At times when prices are rising and the inflation rate is behaving in a way that sometimes does not exactly reflect the rise in prices of frequently purchased items, it is important for users to be familiar with the production methodology used by an NSO to produce the CPI. In this way, users can understand why inflation does not fully reflect the cost of living but rather the variation in a set of products defined according to a transparent and robust methodology[2]. Hence, it is important for NSOs to engage in regular, pedagogical communication, with clear, simple language that is accessible to a broad range of users.

Communication of the CPI

The CPI is communicated to the public through official reports, often with breakdowns by purchasing categories, regions, large cities, and more. These communications are often brief summaries of the latest data that provide some context on the drivers of the monthly or annual change. These reports are often written for media consumption and have little in the way of methodology or concepts in their main text. Some NSOs (e.g. Statistics Canada, Statistics Netherlands, Statistics Thailand) present the figures using interactive visualisation tools and

[2] The CPI frequently is called a cost-of-living index, but it differs in important ways from a complete cost-of-living measure. The cost-of-living index is a conceptual measurement goal, and not a straightforward alternative to the CPI. A cost-of-living index would measure changes over time in the amount that consumers need to spend to reach a certain utility level or standard of living. Both the CPI and a cost-of-living index would reflect changes in the prices of goods and services, such as food and clothing that are directly purchased in the marketplace; but a complete cost-of-living index would go beyond this role to also take into account changes in other governmental or environmental factors that affect consumers' well-being. It is very difficult to determine the proper treatment of public goods, such as safety and education, and other broad concerns, such as health, water quality, and crime, that would constitute a complete cost-of-living framework. Since the CPI does not attempt to quantify all the factors that affect the cost-of-living, it is sometimes termed a conditional cost-of-living index.

dashboards, which help the public to understand the data, trends, and developments more easily. Recently, it became more critical to communicate and also explain the way in which the CPI is calculated, as some parts of the public have doubted or not completely understood the methodology and why consumer prices are felt differently in real life (e.g. the Federal Statistical Office of Switzerland has made several videos (in English[3],[4] and French[5]) to describe the process and challenges in accessible language).

[3] https://www.youtube.com/watch?v=xZdopkGNdeo
[4] https://www.youtube.com/watch?v=t2BXjbiLmMo
[5] https://www.youtube.com/watch?v=lhmjO-gvo9s

3. Values and Environmental Scan

Values

The Strategic Communication Framework for Statistical Institutions sets out the values and principles that should guide any statistical communication strategy. These are inherent in many communication outputs across the international statistical system. However, a universal communication challenge, such as rapidly rising inflation, is an opportunity to reflect on and review our adherence to these values and principles.

The principles outlined in the SCF include:

- being impartial
- being visible/vocal
- giving equal access
- being relevant
- being timely
- being flexible
- ensuring data confidentiality and security, and
- being innovative.

Given the widespread engagement with CPI and inflation data, their universal impact, and the national and international discussions generated around them, it is particularly important to review whether we have been visible/vocal enough, and if the information which we have supplied has provided equal access.

Environmental scan

The digital and information age has substantially increased the strategic importance of data and its value as a resource of the state. This has resulted in the increased scrutiny of where information is coming from and how reliable it is, which in turn brings increased attention to the work of NSOs. Such scrutiny presents opportunities to highlight the relevance and value of statistics, and it also increases the risks attached to not responding effectively to situations in which statistics and data are an integral part of the public discourse. There is a growing responsibility for NSOs to be aware of what is in the public discourse and to provide insights and context where appropriate. In an environment in which information and misinformation are used strategically to influence attitudes and decision-making, it is incumbent on NSOs to be proactive in highlighting the reliability, accuracy, and quality of official statistics. As always, this has to be balanced with the need for political independence.

SWOT analysis of a communication challenge or crisis

Any challenge or crisis provides an opportunity to identify strengths, weaknesses, opportunities, or threats (SWOT), both within an organisation as a whole and for its operational and strategic communications.

Strengths	Weaknesses	Opportunities	Threats

Strengths and Weaknesses

These will vary according to the capacity and capability of an organisation. At a minimum, organisations should have a plan in place to deal with emerging crises and a communication structure that allows for the early identification of a crisis. In the case of the inflation crisis, there was a variation in the existing assets and resources that were available to explain the CPI, such as what it measured and how it should be applied. The ability to respond was enhanced when these resources existed and possibly hampered when relevant material had to be developed. Additionally, the routine nature of the CPI release could be considered to be a strength or a weakness depending on how it was viewed within the organisation. The long-term existence and established nature of the methodology were strengths in terms of communicating the reliability and accuracy of the data. However, the routine nature of the data might have resulted in assumptions of widespread understanding that proved to be unfounded as the public discourse emerged. There may be value in identifying key or headline outputs and ensuring that there are accessible explanations on methodology and key figures available for use in crisis situations.

Opportunities and Threats

Crisis communication situations by their nature tend to pose a threat to the reputation of an NSO. In the case of the discourse on inflation, the threats have ranged from issues such as a lack of understanding of how inflation is measured, to misinformation about the application of CPI data, and accusations of political interference. The situation has also presented opportunities to draw attention to the value and accuracy of NSOs' data and its relevance in times of crisis. An important element concerning whether a crisis such as this one diminishes or enhances an organisation's reputation can be the approach taken to communication. Understanding a threat may also present an opportunity to switch the mindset from a purely defensive to a more open, honest and transparent level of communication[6]. In the case of the CPI, despite it being a "headline" indicator which many people are aware of, it is not a cost-of-living index (see also footnote 2). The threat of citizens misunderstanding the CPI and questioning its relevance or validity could be offset by taking the opportunity to highlight other outputs that provide more context for, or measure the impact of, inflation on different sectors of the economy. This could help to better position the NSO as a trusted source in times of crisis.

Box 1: Statistical organisations being blamed for the inflation crisis — challenges arising due to a misunderstanding about their role (Central Statistics Office of Ireland)

[6] Fifteen years ago, Federal Statistical Office (FSO) of Switzerland used to be criticised that they only collected prices once a month and therefore the prices were not representative of what happened during the whole month. FSO spoke openly about this and, as a result, got access to the first set of scanner data. Acknowledging that certain improvements are possible humanizes the price statistician and brings more partners!

Messaging from utility and mobile phone companies

One challenge that the Central Statistics Office (CSO) of Ireland has faced arose from the communication between utility and mobile companies and their customers. A number of these companies' websites made reference to the CSO "setting" the inflation rates, and when customers complained about price increases, staff referred them to the CSO as the "responsible" body. This caused an increase in calls and complaints from members of the public who were essentially blaming the CSO for the increased cost of their bills.

The CSO's remedial action

The statistical office engaged with the companies, requesting them to ensure that any references to the CSO and the CPI on their websites referenced information published by the CSO rather than setting rates. They were also requested to ensure that their staff were aware that the CSO only measures inflation and is not responsible for it.

The CSO put an explanation of how the CPI is calculated on its website with a link to an accompanying video explainer.

There are still references to the CPI as the basis for price increases on several websites. However, it is now clearer that the companies are using the published rate rather than following any instruction or policy from the CSO.

The number of calls to the statistical office in relation to this situation has dropped significantly.

This communication challenge highlights the importance of strong links and mutual awareness between the statistical production area and communications. As a monthly "routine" release, it is easy to miss the time when it becomes something that everyone is talking about and scrutinising closely. It is important to have a process whereby the statistical area can alert the communications area to any major developments or issues, and the communications practitioners can ask statisticians questions about any issues which they spot in a release.

The conversation on inflation has also provided an opportunity for NSOs to engage with citizens who may not normally be aware of the statistical office or the data it produces. It is important to leverage this opportunity, to not only explain the particular issues involved here, but also to draw attention to the independent and principled nature of what NSOs do. This can be an opportunity for NSOs to present themselves, to citizens who do not normally engage with NSOs, as trustworthy, independent, and valuable.

It may also present an opportunity to point users in the direction of other products that could be of value to them, and to assess NSOs' impact on user journeys, such as by providing users with links that allow them to see the bigger picture of prices and inflation.

4. Communications Objectives

Having in mind the type of information that the CPI is, its great importance to many different users and the different ways in which it is used by society, CPI communication objectives must enable the development of strategies to improve CPI literacy and engagement with users.

The main communication objectives for the CPI and the strategies to achieve them are:

1. **Informing key stakeholders,** data **users**, media and, by extension, citizens about the rate of inflation and its key drivers, the various components of the CPI, such as how prices are collected, treated, and calculated, and about which data and tools are available. This can be achieved by, for example,
   - creating audience-targeted news and messages;
   - leveraging social media and government websites to disseminate up-to-date information and metadata about the CPI, price changes and their impact on consumers;
   - using infographics, short videos, or short stories to explain the CPI in an engaging way.
2. **Improving citizens' understanding** of the CPI and its value to curb the spread of mis- and disinformation. This can be achieved by, for example,
   - developing intuitive creative/visual products that compare headline CPIs to citizens' personal consumption patterns. These products would portray inflation not as a one-size-fits all measurement, but as an economic reality that affects various citizens differently;
   - creating fictional characters (personas) who represent citizens in varying situations and regions and with different consumption habits;
   - creating short videos explaining the CPI in plain language and which could be featured on websites and social media during key dates. An NSO expert behind the camera, puts a face on statistics and is an excellent way of communicating it;
   - helping people to understand statistics and figures related to the CPI by using simple language and real examples to explain the CPI concept;
   - helping the media understand the CPI concept so that they can convey correct information to the public;
   - advising people on how to understand the CPI in the context of their personal finances, such as budget planning and investments.

Box 2. Challenges arising from the lack of understanding of CPI concepts (Statistics Indonesia)

The Badan Pusat Statistik (BPS) or Statistics Indonesia, Indonesia's NSO, has had several issues regarding price statistics in recent years, including:

- The weight of the impact of price increases is different in each region, resulting in the BPS receiving many protests from local governments. For example, when there is an increase in the national price of electricity, the impact of this increase can result in an increase in the prices of other goods that varies by region. This is of course because the number of electricity users is different in each region. Good communication between agencies is thus needed.

- The calculation of inflation in Indonesia is limited to price, not size or volume. Last year the BPS had a problem with the scarcity of oil in Indonesia. The calculation of inflation in Indonesia cannot capture the total volume of commodities sold, so it is only based on the price of a commodity.
- The prices of a commodity are often different in modern markets and traditional markets. This is because the modern market tends to get a more guaranteed supply of products so that their prices tend to be stable, while in the traditional market the opposite is the case. The BPS is often criticised because the prices experienced by traditional communities tend to be higher than the prices released by the BPS.

3. **Building and maintaining an active CPI network** by proactively reaching out to the media, the general public, and other stakeholders, and to **explain in plain language** the discrepancies between slowing headline CPIs and the continued rising prices of everyday items by:
   - collaborating with the media to provide accurate coverage of CPI and inflation trends;
   - encouraging the public to ask questions and participate in discussions regarding inflation and the CPI;
   - receiving input from the public to improve the understanding and delivery of information.
4. **Building a brand and trust,** reinforcing an organisation’s presence during key promotional dates, furthering opportunities to collaborate with new stakeholders, and building on existing relationships to bring CPI messaging to a wider audience. Examples include:
   - ensuring that CPI data and calculation methods and data sources are transparent and easily accessible to the public, and explaining how this data is used in economic and fiscal decision-making;
   - looking into events in which we can join partners, such as national banks, to explain the full impact of inflation;
   - official workshops/webinars and speaking opportunities, podcasts, and youth conferences/workshops;
   - promoting how-to videos, which traditionally perform well with academia and young people.

Increasing the public's understanding of the CPI requires collaborative efforts between NSOs, governments, educational institutions, the media, and society. Through an effective educational approach, the public will be better able to find accurate information and avoid the spread of misinformation or disinformation regarding the CPI.

Box 3. “Ride along with price data collectors” initiative showing transparency and building trust (U.S. Bureau of Labor Statistics)

Citizens often note that inflation does not seem to reflect their own reality. There is a sense that the inflation data are just developed in a room of statisticians without any link to the real world. The U.S. Bureau of Labor Statistics (BLS) approached this by inviting news media as "ride along" data collectors. The first CPI piece was a public radio story that aired in July 2021. Within a week, the BLS had requests from four other major media outlets requesting to do "ride-along" interviews. All of these news reports increased both traffic on BLS website as well as interest in applications to be a data collector for the BLS. This strategy of embedding media with economists to show the process of collecting and the care and precision that goes into this work has been successful, and BLS has replicated this for other surveys as well.

Although, it was not a new concept for BLS, this ride-along a price data collector came about from a series of questions by a reporter. Once it was clear that the reporter had lots of questions about how the data was collected, the BLS offered to allow the reporter to ride along with a price data collector. Before the ride-along, the BLS required the reporter to sign a nondisclosure agreement. This agreement stated that no company names (including the names of onsite workers) were to be mentioned in the reporting, that all branded items had to be blurred out of any photographs, and that there was no reporting of the specific prices of branded items. The BLS paired the reporter with an experienced price collector.

The BLS has now conducted a few of these types of interviews and it has learned some lessons from them. Even though BLS had secured nondisclosure agreements from the reporters, they discovered in one instance that a shop owner was so proud of his public service as a participant that he wanted his name and store mentioned in the reporting. BLS had to convince the owner otherwise and to remind the reporter of the nondisclosure agreement, emphasising as well that collecting data confidentially facilitates continued cooperation with respondents. Another lesson was to request that the CPI story not be published directly ahead of a CPI release this to avoid the perception that the media are cognizant or have access to information prior to the CPI's release.

5. Audience Segmentation

For several years now, the communication environment in which the NSOs operate has been affected by a profound change of scenery. Social platforms have assumed the function of news distributors, while media consumption habits have been revolutionised by the internet and mobile telephony and, more recently, by generative AI platforms and tools, such as ChatGPT or Bard.

Once they are on the internet, statistical data enter a broad "life cycle" in which they interact with different information and processes (on social media platforms for example); at the same time, they are subject to multiple interpretations and even possible misinterpretations.

In addition, the proliferation of "unofficial" statistics, surveys, and data find wide circulation in the media, even though their production methodologies and processes are not always clarified. Thus, it becomes crucial for the producers of official statistics to address the issue of "trust" in, and the reliability of, the data disseminated. This means that the need to respond to the different demands of various users goes hand in hand with the urgency of promoting widespread statistical literacy (which is still scarce among the general public) and the relevant use of data. It is also necessary to clarify the processes and methods of the production of the data, as well as possible interpretations of the data.

Taking this into account and referring to the specific communication on the CPI, which are our main target audiences? The CPI is an example of the statistical information that is most closely followed by our user community, especially in times of global economic crisis. Therefore, the target audiences mainly coincide with those of official statistical information, and, in this regard, we can surely refer to the classification "The Users of Statistics and Their Role in the European Society" that was drawn up by the European Statistical Advisory Committee (ESAC)[7].

This classification divides users into two major categories, with each set of users differentiated according to their interests:

- institutional users
- non-institutional users.

This distinction is *a priori* important for several reasons. **Institutional users** generally need data for governmental and administrative decision-making: their data needs are considerable and usually have priority in terms of the demands that are met by data producers. Furthermore, the data for institutional users typically needs to allow for comparison over time and space in order to verify the impact of decisions.

[7] https://ec.europa.eu/eurostat/documents/735541/6942269/2015_1175_Users+of+statistics+and+their+role+in+European+society.pdf/893231ce-fac3-3951-fe05-5b1c176491c7?t=1634036251674.

Non-institutional users have different needs that are particularly focused on having statistics ready for communication with and diffusion to wider audiences. For these users, it is important to be able to show new trends of interest and importance related to developments in the everyday lives of citizens.

It is clear that users may have several interests (for data), while they might actually belong to different (social-economic) classes. However, here they are assigned to user groups with the criterion of the most frequent and/or prevalent interest.

The institutional users include governmental agencies and departments, specialised international, regional, and supranational organisations, central banks, private sector banking economists[8], academia and research institutions, and specialised associations or companies (such as for students, employees, or manufacturing groups).

Non-institutional users include the following groups, according to their interest in statistics:

1. Users with a general interest (e.g. economic growth)
   - journalists and media
   - citizens
   - students (by level of education, or age)
   - teachers (by level of teaching education)

2. Users with a specific subject/domain interest (e.g. health)
   - other decision-makers
   - policy analysts
   - marketing analysts
   - experts in a specific field.

3. Users with a research interest (e.g. innovation in enterprises)
   - the scientific community — academia and researchers at universities and research institutions
   - consultants and researchers in governmental agencies and the private sector.

Another useful taxonomy drafted by the ESAC and disaggregated at the individual level identifies users according to their frequency of statistical usage and proficiency:

a) **heavy users**: researchers, specialists, politically or civically engaged citizens, and other people who use statistics on a daily basis. Typically, this is the person who knows where to find data and how to interpret it. Within this category we can also distinguish the *very heavy users*: researchers who would be routinely engaged in using disaggregated and microdata in their research and who could contribute to the improvement of data quality by engaging with data producers.

[8] They provide a service to their clients informing on the bond trade and other debt market decisions. They are also influential second-hand communicators of inflation information (kind of like influencers). They can assist the NSO to disseminate key messages.

b) **light (occasional) users**: users who check some figures from time to time. They would know the websites of NSOs and international/regional bodies (e.g. the UN, Eurostat) but would find some difficulty in getting the data they need and would not be looking for metadata. At the same time, it is worth mentioning that this was the particular group of individuals which NSOs experienced an increased need to serve during this latest inflation crisis.

c) **non-users** who might be *potential users*: all people who do not go looking for data, believing it is something difficult to understand and not being aware of its relevance and insights.

Of course, as is often the case, these typologies — institutional users/non-institutional and heavy/light/non-users — overlap: institutional users would more likely be heavy users, and non-users are potential users with a general interest.

The ESAC classification, as mentioned above, refers to users of statistics in general. This includes those who are specifically interested in the CPI. In addition, there are some specific user groups that closely follow the CPI and related information, such as central banks, economists in government departments and ministries, research institutions and academia, and even student loan companies (for the calculation of student loans, for example).

An example of more specific research on the users and uses of the CPI and other related information and indices was produced by the UK's Office for National Statistics (ONS) (https://www.ons.gov.uk/economy/inflationandpriceindices/methodologies/usersandusesofconsumerpriceinflationstatistics).

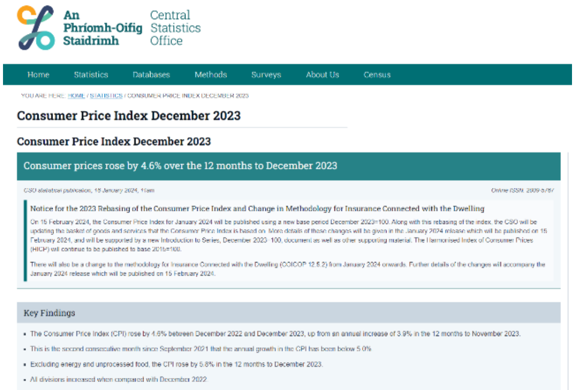
6. Communication Channels

As mentioned in the previous chapter, the CPI figure is relevant to all target audiences of statistical information and acquires particular relevance in times of global economic crisis. For this reason, the communication channels to be used are all of those which are available, both traditional and digital.

Although they are quite expensive, traditional channels are accessible to everyone and provide a lot of visibility, such as with advertising on television or billboards. It is true that your message can reach anyone via such channels, but to succeed in being noticed by standing out from the competition, you will need campaigns prepared by creative professionals who know how to offer something attractive.

In this case, we are talking about offline communication, by which we mean the set of communication tools (rather than channels) that do not use the internet and thus include:

- reports/ newsletters/ flyers/brochures
- billboards
- traditional media (e.g. television, radio)
- newsrooms.



Source: https://www.cso.ie/en/releasesandpublications/ep/p-cpi/consumerpriceindexdecember2023/

Offline communication represents a communication strategy that can support and augment internet communication, while the reverse is not possible. With offline communication it is therefore possible to connect directly with an audience that does not use the internet. While a large (and growing) percentage of people are now online, we cannot forget those who cannot turn on a computer or do not have a smartphone, but who have the same right as others to receive statistical information from official sources. In addition, there are still markets that are difficult to reach by using only digital media.

A traditional communication strategy enacts the "seeing is believing" culture: consider, for instance, an outreach campaign that captures the audience's interest, leading the audience to investigate and research some specific, additional data.

In other words, traditional communication allows us to connect with an audience that may otherwise be excluded from our information offerings. However, it also has limitations since offline communication tools lack interactivity with their audiences. While these tools can accomplish much, they cannot achieve everything. Therefore, a more effective approach today involves integrating both traditional and digital modes of communication.

To borrow the definition coined by Marshall McLuhan,[9] there are "hot" media, which fix their content and constitute a stable form of communication (readers or viewers read or watch without modifying anything), and "cold" media, which provide space for the audience to modify

[9] https://designopendata.files.wordpress.com/2014/05/understanding-media-mcluhan.pdf.

the messages, and which are different each time due to audience participation. This terminology does not refer to the temperature or emotional intensity, nor to some kind of classification, but to the degree of participation. A warm/hot medium allows less participation than a cold medium, a lecture less than a seminar, a book less than a dialogue. And our age is full of cases that confirm the principle that the hot form excludes, and the cold form includes.

Turning to the analysis of digital channels, we see that they facilitate interactive communication with our audiences. Additionally, digital platforms provide cost optimisation by targeting specific individuals who align with their known interests or pages which they follow. While the expenses associated with these campaigns are lower, they do require professionals with advanced digital skills.

And how can all this be traced back to an official statistical organisation that intends to reassure its audiences about the reliability of the information provided with the release of CPI data?

Referring to some of the case studies reported in the annexes to this report, we see how, in very different geographical and political realities, certain topics evoke similar reactions of disbelief and perplexity from the public. It is extremely complex to explain the difference between true inflation and perceived inflation to a non-expert citizen-economist, who knows only that prices seem much higher to them than what we tell them as NSOs.

It, therefore, becomes essential to use every channel and tool at our disposal to counter the “infodemic” of which we are victims today as citizens, and in which scientific facts are often in conflict with accidental or intentional disinformation. We must set ourselves the goal of improving scientific communication and contributing to the critical thinking, digital awareness, and media literacy of practitioners as well as non-expert users. The result will be a more informed public and a more resilient democratic society. Think for a moment of what we convey through social networks: in this case the users have the possibility to comment, review, and post in turn, but also to receive from NSOs precise and specific answers to their specific questions. This reception becomes particularly important when the data disseminated by NSOs arouses perplexity and is not clearly understood.

The advantages associated with digital channels are varied: the most relevant is given by the possibility of personalising messages based on the target to which they are addressed, aligning them with the characteristics of the users to whom they are addressed.

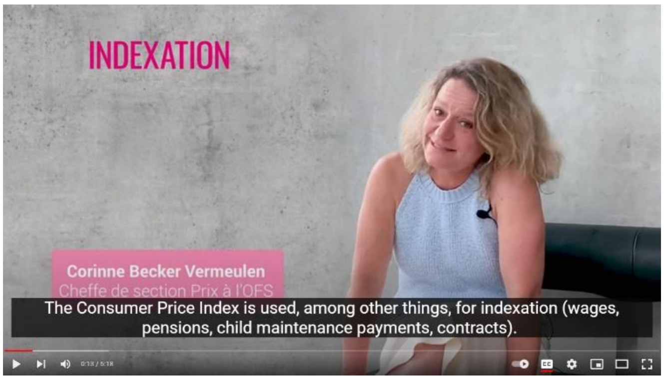
Digital communication aims to stimulate interaction between users, such as through the sharing of content or of one's own personal opinion. Moreover, it aims to build an online reputation, a positive perception of the organisation that is offering the information and consequently also of the organisation's messages.

But what are the digital tools and how should they best be used?

We start from the **website**, which performs various essential functions. It provides information about an organisation, including links to social networks on which we have our accounts/pages, and it is essential for the strategic positioning on search engines, a fundamental requirement to allow potential users to find us quickly. In order for the site to be intuitive and easy to consult for the user, it must comply with a series of parameters, graphic, layout, and structural. To be more precise, each website of the different statistical institutes is an ideal platform to host a section dedicated to the CPI, presenting the (annual and monthly) CPI report, explaining the various indices that measure inflation to their target audiences, and publishing a series of FAQs that can provide answers to the most frequent and recurring questions (see, for example the website of the Italian National Institute of Statistics (Istat), https://www.istat.it/en/archivio/36294).

A **blog** can represent another fundamental tool in the field of digital communication strategies. Its function is mainly to develop a community of interactive users.

Furthermore, **podcasts** have recently become more and more popular. They can be used to reach different types of users and, if a statistical agency decides to use podcasts, they can be adopted to explain the concept of a basket of goods and services and the difference between the different indices that measure inflation, using a language that is accessible to everyone, including non-experts. An example of this is the experience of Istat, which recently launched a podcast channel (currently available in Italian only) that tries to address complex issues in a simple and accessible way, but without sacrificing scientific accuracy (https://www.istat.it/it/dati-alla-mano/italia-in-cifre/i-podcast). Based on data from the most recent Ipsos Digital Audio Survey (https://www.ipsos.com/it-it/podcast-indagini-ipsos-digital-audio-survey-podcast-qualita-strada-crescere), which explores audience preferences and digital audio usage patterns, it is evident that this communication format is gaining favour among an expanding segment of users. This is probably because it proves to be an increasingly effective communication method both for engaging and for getting people to change initially distorted or erroneous opinions on a given topic (see Box 4 for the example on Reddit from Statistics Canada).



Source: https://www.youtube.com/watch?v=lhmjO-gvo9s

Other tools used to convey messages and content include, of course, **video content** (such as reels to explain methodology, and short interviews), mobile apps, and social media advertising campaigns. The human face behind the camera, humanises statistics and is an excellent way of communication. Moreover, the videos are valid for a longer period of time, so the investment is well worth it. Ad hoc, tailored videos in diverse formats are crafted to simplify the explanation of the CPI economic concept, disseminated through both websites and various social networks. It is not imperative to use all social media or to be present on every platform. Each of them has its own peculiarities that make a platform better suited to one topic rather than another.

As an alternative communication medium — even the main one in some cases (such as crises, disasters, outbreaks, pandemics) — **social media** are crucial. Based on the "Digital 2023:

Global Overview Report", We are social[10] and Meltwater[11] show that social media users have now reached 4.76 billion or approximately 59.4% of the global population, a figure that is steadily increasing. Millennials, Generation Z, and younger generations have grown up with social media as their daily medium for consuming news. Social media also have their own specificities which provide NSOs with various alternative forms of communication to reach the public. The use of social media has been practised in NSOs in various countries. For example, in one posting of statistical information, Indonesia's BPS is able to reach tens of thousands to hundreds of thousands social media users.

In addition to the tools listed above, digital communication makes use of a **series of activities** concerning **Search Engine Optimization** (SEO) and **digital PR**. The SEO identifies the set of activities required to make a website visible on search engines. By optimising the content, it is possible to convey qualified traffic to a website. Digital PR includes the set of public relations strategically implemented online with journalists, influencers, bloggers, and stakeholders in order to increase an NSO's online presence and improve its reputation.

The concept of inflation must therefore be explained using all these channels and tools at our disposal, so that our users learn how to independently distinguish real inflation from perceived inflation, and also learn where to go to retrieve official information amidst the multitude of unverified news in circulation.

Nevertheless, as communicators of official statistical information, the paramount objective for us is to engage with our users effectively, especially when they reach out with concerns or inquiries about the data which we disseminate. This interaction can occur through various channels, including social media (with a consistent reference to the institutional website for additional details in the dedicated web sections), email, or a user platform if the NSO has one.

Some practical examples related to what has been explored in this chapter can be consulted in the case studies in the annexes.

Box 4. Reddit "Ask Me Anything" initiative to reach out to audiences through social media (Statistics Canada)

10 https://wearesocial.com/uk/
11 https://www.meltwater.com/en?utm_source=kepios&utm_medium=affiliate&utm_campaign=affiliate-kepios-analysis_content-012623&utm_content=website

Source:https://www150.statcan.gc.ca/n1/daily-quotidien/210728/dq210728a-eng.htm

Statistics Canada has been proactively engaging users on social media, utilising platforms such as Twitter, Facebook, and LinkedIn to convey our messages that the CPI is a robust and accurate methodology to track consumer costs, as well as to answer social media enquiries.

On 28 June and 21 November 2022, the Agency hosted "**Ask Me Anything**" Q&A events (Reddit AMA) allowing subject-matter experts to answer questions which Canadians have about the CPI, inflation, and the updates to the CPI basket. Another AMA will be held after the next annual basket update.

7. Content Strategy

In a world of limitless resources, statistical agencies could spend time and energy on messaging in multiple ways on several channels. However, statistical organisations are often not in the position to do that. We often have limited budgets and human resources to execute a communications strategy. This is why strategically mapping the right channel and content to the right audience is so important. If rumours about an NSO's credibility are circulating on social media, posting a technical paper to an academic forum may not be the most effective method of combating attacks on the NSO's brand.

It is important for NSOs to carefully map the correct message and channel to an audience.

One of the more frequent criticisms stemming from the COVID-19 pandemic was that the NSO-issued CPI did not reflect a perceived reality. To address such-minded users, it was important to focus more on showing rather than telling the audience about the CPI[12]. For these users, it was important to be brief and to focus efforts on placing content on platforms which they already visited, rather than directing these users to NSO websites. In our collection of case studies, there are a few practices to keep in mind when conveying key messages.

Convey the message with empathy

Rapidly rising prices, particularly for food and household items, have imposed hardships on many families and households. People tend to recall the last thing they purchased, and food and household items are among some of the most frequently purchased items. When the toilet paper they need is in short supply and twice as expensive, a CPI rising by only 5% seems discordant with their most recent purchasing experience. In the example from Istat (Box 5), infusing their inquiry responses with empathy ensured that the citizens felt understood and heard. By taking such a step, NSOs can help increase their relevance to their constituents — that NSOs are truly trying to measure the human experience rather than be a faceless bureaucratic entity.

Box 5. Humanising the relationship between statistical organisation and the users — a standard structure for user inquiry response (Istat, Italy)

> With specific reference to the issue of inflation and prices, Istat often receives messages from citizens with complaints about and requests for clarification on what they believe are inaccurate data that do not correspond to the real economic situation in the country. In collaboration with subject-matter experts, the answers we provide always follow a sort of standard structure. Moreover, in all answers we include a cross-reference to the website, so that users can go deeper into the answers.

[12] To support and guide countries facing the challenges producing CPI during the COVID-19 outbreak, UNECE Steering Group on Consumer Price gathered different country experiences and released the Guide on producing CPI under lockdown, https://unece.org/sites/default/files/2021-12/Guide%20on%20producing%20CPI%20under%20lockdown%20WEB%20version.pdf

- Start the dialogue with an incipit that makes the user feel understood and welcomed; therefore, humanise the relationship between Istat and its users or respondents (e.g. "Dear … we understand the concerns that motivate your message, and which are certainly dictated by the economic difficulties in which so many families in our country find themselves…").
- Continue by entering into the methodological merits of the disputed data, reassuring the applicant, with useful information, to read differently the data that we provide, and that the data is the result of careful work free from any external influence (e.g. "However, we would like to reassure you that the basket that Istat uses to calculate inflation contains a good part of the products that you indicate in your message…")
- Conclude by remaining available for any further clarification and always referring, for further information, to the corresponding dedicated sections on the corporate website.

Find the right channel!

NSOs have taken great care to show their relevance. At Statistics Canada, they began an Ask Me Anything Reddit session in which users could ask questions (Box 4). This is a forum designed for people to ask questions to subject-matter experts. These Ask Me Anything types of forums are also empathic in some ways because they allow users to ask questions that they might not have asked in a typical email exchange. The relative anonymity of Reddit and the structure of the forum allows for a free exchange of information, on platforms that users may already be visiting.

Show, rather than tell

During this time of rapidly rising inflation, many NSOs have used short videos to demonstrate concepts. Most NSOs have found these to be effective strategies for clearing up misconceptions about or developing an understanding of topics, such as how data are collected and how NSOs account for "shrinkflation" (whereby the size of a product is smaller, but its price stays the same). Videos can sometimes communicate much more effectively because of both the visual and aural cues that the viewer receives. They also rely less heavily on the language centres of the brain for comprehension. Often, these videos are shared on social media platforms, thereby again meeting users on the channels that they are already using.

Make it relevant

NSOs typically produce statistics at the national level, providing information as well on sub-national geographical areas, along with the CPI for various population segments. However, generally speaking, these are statistics showing the average experience across a wide range of individuals. Not everyone has the same purchasing habits. For example, urban dwellers who rely on walking or public transport may not purchase any fuel at all, while those who live further afield may never purchase a train ticket. Sometimes these individual differences can make it difficult to explain concepts. In Statistics Canada's example (Box 6), the NSO developed an application that allows for citizens to develop their own CPI, while conveying the concepts regarding how the CPI works.

Box 6. Creating intuitive products explaining price statistics (Statistics Canada)

To help citizens better understand the CPI, Statistics Canada engaged consumers to address some of their concerns as well as to expand data literacy and the general public's knowledge of the CPI program.

The agency developed creative visual products to demonstrate that inflation is not a one-size-fits all measurement, but an economic reality that affects different citizens differently. These products included:

- The Personal Inflation Calculator which is an interactive tool that allows consumers to calculate their personal inflation rate based on their household spending. https://www150.statcan.gc.ca/n1/pub/71-607-x/71-607-x2020015-eng.htm
- Short videos explaining the CPI in plain language, featured on the website and on social media. The videos include fictional characters who represent citizens in varying situations and regions with different consumption habits. https://www.statcan.gc.ca/en/sc/video/cpi2
- During key theme weeks and months, such as Financial Literacy Month, Nutrition Month, and Small Business Week, Statistics Canada joined in on the conversations, which provided it with a key opportunity to talk about how inflation affected specific groups and to correct any disinformation.

8. Evaluation

NSOs are in the measurement business, and so, in order to understand the value of the communications work, NSOs need to measure the outcomes. Despite being in the measurement business, measuring the success of our outreach can be a tricky business.

Among the most commonly available metrics are those commonly reported through website metrics by organisations such as Google Analytics. These sites offer information on pageviews, time spent on the page, repeat visits, and how an individual arrived or left a webpage. Although these are easy measures to obtain, they often do not give enough information to understand success. Pageviews may tell an NSO the relative popularity of a page, but not if it met a user's needs. As more content is pushed through social media sites, web metrics can only tell part of the story.

Social media metrics can measure engagement. Likes and shares can indicate that a user has read or in some way engaged with the content. Likewise, impressions can give a sense of the "reach" of the content, that is, how many people saw and had the potential to read the content. With changing social media algorithms, it can be difficult to interpret whether one has been more or less successful or a beneficiary or victim to a change in the algorithm. NSOs can benefit from examining which accounts provide the most influence for their social media, as each social media platform has different user characteristics which will determine the success of an NSO's communication strategy.

Another metric commonly used across NSOs is media mentions. There are several clipping services that can provide agency mentions in both traditional and social media. Some challenges can include calibrating the search term results to yield valuable information. In addition, these results can sometimes provide a deluge of information, and having some discernment in identifying major outlets or major amplifiers can be useful. Many NSOs use these metrics to see if news stories result from briefings or other outreach materials. Further analysis can be conducted to determine the sentiment and faithfulness of the reporting.

Though these three areas of metrics (website, social media, media mentions) help provide some quantitative data on outreach, most communications initiatives have to also perform some qualitative research to have a more complete picture of their outreach efforts. This may include analysing a particular campaign, identifying the largest amplifiers and looking at their followers to examine which new audiences may be being reached. Likewise, getting to know who the trolls and misinformers are can be helpful, if not much needed, information in the communications arsenal. In addition, scouring comments can help identify questions or misunderstood concepts and can help communicators more finely tune their messages.

This section is certainly not an exhaustive list of all the types of metrics or success criteria communicators can use, but from the experience of many NSOs it is often a combination of several sources that helps to provide a more comprehensive picture.

Annex: Case Studies on Communication Inflation

1. United States Case Study — Communicating inflation

With the onset of the COVID-19 pandemic, the U.S. Bureau of Labour Statistics (BLS) immediately shifted from in-person data collection to internet, phone, and web scraping data collection[13]. Prices in the United States for a number of staples, such as toilet paper and flour, skyrocketed during the initial onset of the pandemic. In addition, with global lockdowns, shortages existed for other consumer goods.

Collection information

With the rapid change from in-person collection to phone and internet data collection, the BLS wanted to be transparent about the shift. In response, each month with the CPI release, tables containing the collection method, response rates, and changes in standard errors were posted. In addition, as the pandemic wore on, the BLS posted questions and answers to commonly asked questions. Some of these questions covered concepts such as “how do you measure prices if the item is out of stock?”.

To help gauge customer feedback, the BLS placed a short survey on each page with a simple interface: "Did you find this helpful?", thumbs up/down. Customers were also presented with the option to leave a comment with their rating. Among these open-ended comments, some users made suggestions for ways to make the pages more navigable or for adding information that they would deem helpful. The BLS implemented these suggestions within days (if the data was available).

In addition to the short survey, the BLS presented the entire spectrum of COVID-related information to its advisory panel, and it sought feedback on its own approach to communicating about pandemic-related survey changes as well as COVID-related research. The advisory panel largely agreed with the approach and made a few suggestions for further data presentations, such as a dashboard, which the BLS released a few weeks later.

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[13] All BLS data collection was affected in different degrees by the pandemic. There were taken the necessary steps to protect BLS employees and survey respondents across the United States and all in-person data collection were discontinued until these could be performed safely. Some surveys began to collect data in new ways because in-person visits were suspended. BLS collected data by electronic means, such as video calls, internet, and email, as well as more traditional methods like the telephone.

BLS carefully assessed the areas, industries, and firms that were most affected by the pandemic to ensure that it did not add burdens to business at that difficult time. The staff worked flexibly with employers to reduce the burden and frequency of surveys, where needed. BLS continued to publish data on institution website (https://www.bls.gov) and provided public assistance over the phone and email. But of course, some survey respondents' availability, ability, or willingness to provide data was disrupted. For more details on data collection changes and the effects of the COVID-19 pandemic on response rates, you may refer to BLS COVID-19 related webpage www.bls.gov/covid19/home.htm

Concepts

In addition to the collection information, the BLS saw an increase in the number of inquiries regarding the concepts for inflation. Many of these concerned owners' equivalent rent, packaging sizes, quality adjustments, and the methodology for new cars.

Shrinkflation

"Shrinkflation[14]" is the inflation that consumers experience when their normal 8-ounce candy bar has the same price but is now only 6 ounces. This concept is certainly more straightforward than some others. In addition, the BLS's subject-matter experts secured some spots on major news networks to explain how shrinkflation works[15] and to assure the public that these price pain points are indeed captured by the survey.

Quality adjustment

Another area of confusion was on quality adjustments, namely with respect to computer and communication equipment such as mobile phones. With each new issuance of computers and phone models, there is often an increase in speed, memory, or other relevant features. Even though the sticker price increases, consumers are receiving more computing power, speed, or memory for the new device, so the inflation for these products may not rise as fast as consumers expect. This practice, coupled with a high demand for these devices and global supply chain issues, made the prices for these goods sometimes difficult to understand. In addition to fact sheets, BLS staff have also served as subject-matter experts for business media and local news reports to help explain this concept.

Automobiles

In the United States, both new and used cars were in short supply during the pandemics (and remain so to this day). Just prior to the pandemic, the BLS began using a new (purchased) data source. Explaining the new method, how the data is used, and the accuracy of the data was critical. The BLS developed questions and answers, a blog, and a few articles showcasing the method.

Does not reflect my reality

Often citizens note that inflation does not seem to reflect their own reality. There is a sense that the inflation data is just developed in a room of statisticians without any link to the real world. The BLS addressed this by inviting news media as "ride-along" data collectors[16]. The first piece was [a public radio story] that aired in July 2021. Within a week, the BLS had requests

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[14] Downsizing is common across food and household commodities, including potato chips, paper towels, cereal, cleaning supplies, and candy. Manufacturers change sizes because market research indicates that consumers are more sensitive to price change than size change. Downsizing impacts the amount of a good a customer receives; therefore, goods that are sold by a specific unit of weight or volume do not experience downsizing. For example, gasoline or steaks generally do not experience downsizing as they are sold per gallon or per pound.
[15] https://www.bls.gov/opub/btn/volume-12/measuring-shrinkflation-and-its-impact-on-inflation.htm
[16] "Ride-along data collectors" initiative was resumed in 2022, when the personal visits for data collection became possible.

from 4 other major media outlets requesting to do “ride-along” interviews. All these news reports increased both traffic on BLS website as well as interest in applications to be a data collector for the BLS. This strategy of embedding media with economists to show the process of collecting and the care and precision that goes into this work has been successful, and the BLS has replicated this for other surveys as well.

The BLS views the ride-along interviews to be one of its most effective strategies. The BLS also developed talking points and made some of the aforementioned conceptual information easier for users to find.

Combatting disinformation

Fake news!

On the day before the June 2022 CPI release, a doctored image of a CPI release was loaded to Twitter. At first glance, this looked very much like a BLS-issued news release.

The BLS knew it was a fake as the figure was incorrect. Also, upon closer inspection, the image seemed to be doctored. The original Twitter account that posted the image did not have a large following, nor was it an account that had frequently tagged the Bureau. The BLS did not immediately respond because it was not clear that the tweet would go much further. However, within hours, major news media were calling to verify if the image was real or fake.

The BLS certainly does not respond to every tweet or comment that the bureau is tagged in, but in the case of disinformation it does have a policy of setting the record straight.

In response, the BLS put out the following tweet:

https://twitter.com/BLS_gov/status/1546964434530275330?cxt=HHwWhMC4haD99fcqAAAz

Of course, the comments that follow were not necessarily kind toward the BLS, but the BLS Twitter account gained 5,000 followers overnight. The follower numbers have only increased since that time. Despite the mocking nature of the comments, it does seem that speaking truth in the face of disinformation raises the credibility of the agency.

Early release?

The latest challenge in our campaign against disinformation concerned whether the CPI release itself was released on time or was subject to an early leak.

For several months, market activity — namely in the futures market — has been rather active ahead of the CPI release. Often there is a higher volume of trading activity ahead of releases, particularly during economic turning points. This activity has led business reporters to question if the news release was leaked ahead of time. The BLS conducted extensive IT testing and reviewed all security procedures and data handling methods to ensure that there were no holes.

For now, the BLS has developed talking points, ensuring customers that the data are secured ahead of release time and that no unusual activity takes place.

Meanwhile, some of these stories have developed into a call (made by some news organisations) for the BLS to reinstate its news embargo room, whereby reporters were given a 30-minute early access window to a small set of releases (the CPI being one of them). This was for the purpose of news agencies to be able to ask good questions and to develop their news stories. However, after investigations by an inspector-general and the FBI, it was determined that the embargo room created an unfair advantage to certain media and was certainly being used for algorithmic trading rather than story development. The BLS has no intention of reopening the embargo room, but the trajectory of the story line does make one question whether there is a financial motivation behind the reporting on this.

This particular issue is still a work in progress, but it does present a communication challenge for the CPI in that the BLS needs to continue to reinforce how securely it holds the data.

2. Italy Case Study — Building trust with price statistics

How is price data communicated in Italy?

Regarding inflation and price statistics, Istat has a dedicated web section where one can find:

- a page with the explanation of the three consumer price indices that Istat calculates:
    a. the consumer price index for the whole nation (NIC), based on the entire present population's consumption;
    b. the consumer price index for blue- and white-collar worker households (FOI), based on consumption of households whose reference person is an employee;
    c. the harmonised index of consumer prices (HICP), calculated according to the EU regulations in force.
- FAQ
- a page dedicated to the monetary revaluation, to allow users to better find the index for the revaluation of rents and of maintenance allowances (it is one of the most visited pages on Istat's website).

For this survey, data is collected through a range of outlets and for the consumer prices of grocery products (packaged food, household and personal care goods). Since 2018, Istat has been using scanner data from large-scale retail trade (GDO) checkouts, which are provided to Istat thanks to the collaboration between it, the Association of Modern Distribution (ADM), and representatives of the main retail chains operating in Italy. Thus, there is no direct involvement on the part of respondents.

Strategies and approaches to increase trust in Istat

With specific reference to the issue of inflation and prices, Istat often receives messages from citizens with complaints about and requests for the clarification of what they believe is inaccurate data that does not correspond to the real economic situation in the country. To directly contact Istat, there are two systems:

1. A contact centre platform (the gateway to the communication and dissemination services provided by Istat to its users, accessible from the contacts section of its website): when navigating the portal, among the services offered there is also the "User relations office", through which it is possible to send — among other things — complaints of various kinds. Most of those that arrive from our users or respondents are about the statistical burden (in Istat surveys in general), or express misgivings about the reliability of Istat's economic indicators, especially inflation, the consumer price basket, and GDP estimates.
2. Social media: on the various social platforms on which Istat is present with an account, users sometimes directly ask for explanations or express doubts about Istats's data through private messages or comments about Istat's posts or tweets.

Either way that Istat receives such complaints or requests, the techniques that Istat adopts to answer them are always the same, whether it responds directly via the contact centre platform or via its social media accounts.

Specifically, with the collaboration of directly competent colleagues (namely from the areas of national accounts and prices who produce indicators of an economic nature, which are also the indicators for which the complaints of citizens and/or respondents arrive most frequently) the answers which Istat provides always follow a sort of standard structure. Moreover, in all answers, Istat includes a cross-reference to its website, so that users can go deeper into the answers.

The standard structure of this kind of answer, in brief:

1. Start the dialogue with an incipit that makes the user feel understood and welcomed; therefore, humanise the relationship between Istat and its users or respondents (e.g. Dear … we understand the concerns that motivate your message and which are certainly dictated by the economic difficulties in which so many families in our country find themselves…').
2. Continue by entering into the methodological merits of the disputed data, reassuring the applicant, with useful information, to read differently the data that Istat provides and which is the result of careful work free from any external influence (e.g. "However, we would like to reassure you that the basket that ISTAT uses to calculate inflation contains a good part of the products that you indicate in your message…").
3. Conclude by remaining available for any further clarifications and always referring, for further information, to the corresponding dedicated sections of the corporate website.

This regards the direct contacts that Istat initiates with citizens — and respondents — with respect to its surveys (again through the Communication and Dissemination Directorate).

Actions that could be put into place to better communicate price indices:

- communication campaigns (both through traditional channels and new media)
- the development of statistical culture through promotional activities (statistical literacy events, a dedicated website, podcasts, and targeted videos)
- a dedicated podcast
- participation in television broadcasts by experts in the field explaining how inflation is measured.

Concepts to be conveyed

One very important thing to make known is that, according to the European System of National and Regional Accounts (ESA 2010), buying a house is an investment expense, not a consumption expense.

For this reason, the calculation of consumer price indexes considers the expenses related to housing to include the supply of water, electricity, fuel (gas or heating oil), expenses for minor home repairs and maintenance (such as electricians, plumbers, labourers, tiles, bathroom faucets), but not the mortgages that citizens take out to buy a home.

In Italy, however, there is a high percentage of the population living in owned homes and paying a substantial monthly mortgage payment, which results in high monthly expenses. This inevitably leads to a higher than measured perception of inflation.

Therefore, it is very important to explain why home mortgage expenses are not factored into the inflation figure.

Another important concept to convey is that which explains that inflation is measured by three different indices. Among these, the one that most reflects the lives of ordinary people is the consumer price index for blue- and white-collar worker households (FOI), based on the consumption of households whose reference person is an employee. In fact, it is the FOI that is used to revalue rents and spousal maintenance payments.

3. Indonesia Case Study — Challenges for price statistics in Indonesia

The BPS, as Indonesia's NSO, has encountered several issues regarding price statistics in recent years, including the following:

1. While facing economic uncertainty in recent years, the president made a decision to control inflation. As inflation is aggregated from the regions, the government ordered all regions to work on it. So far, the BPS has calculated national inflation based on 90 cities out of a total of 514 cities in Indonesia. In contrast to macro indicators, the BPS was expected to provide indicators to evaluate the national government's achievements. Calculating inflation in all city districts would result in a swelling of the budget without having much influence on calculating national inflation. The BPS used the inflation proxy approach and the sister city approach to calculate urban inflation outside of the 90 main cities that contribute significantly to national inflation.
2. The weight of the impact of price increases is different in each region, which led to the BPS receiving many protests from local governments. For example, when there is an increase in the national price of electricity, the impact of the increase in electricity can cause an increase in the prices of other goods that vary by region. This is of course because the number of electricity users in each region is different. Good communication between agencies is therefore needed to explain the confusion that occurs among the public regarding differences in price increases in each region.
3. The calculation of inflation in Indonesia is limited to price, not size or volume. Last year, there was a problem regarding the scarcity of oil in Indonesia. This is because there is an oil mafia that hoards oil. However, the government issued a policy to reduce oil

prices to 14,000 rupiah. When the inflation figures were released, the public protested to the BPS about how it was possible for a commodity to be scarce when there was a deflation of its price in several regions. The calculation of inflation in Indonesia cannot capture the total volume of commodities sold, so it is only based on the price of a commodity.

4. The prices of a commodity are often different in modern markets and traditional markets. This is because the modern market tends to get a more guaranteed supply of products so that their prices tend to be stable, while in the traditional market the opposite is the case. The BPS is often criticised because the prices experienced by traditional communities tend to be higher than the prices released by the BPS.
5. Based on experience, it is easier for the BPS to build communication with the expert community. The BPS has gained considerable trust from the expert community. The BPS uses an open discussion approach regarding the methodology which it uses. On the other hand, the BPS has more difficulty having discussions with the general public.

4. Canada Case Study — CPI: communications challenges

Recently, consumers have faced rising costs in many of their day-to-day expenditures due to issues such as supply chain disruptions, oil price fluctuations, rising housing prices, and changes in consumer demand brought on by COVID-19. Canada's CPI, a year-over-year comparison of the cost of goods and services published monthly, has reflected the impact of these unprecedented events, surging to a series of highs not seen in decades.

Despite these historic rates, some have argued that the headline CPI figure does not accurately reflect the rising costs of many everyday products. This has sparked ongoing public debate within the political arena, academia, industry, and media about how Statistics Canada measures inflation, and whether Statistics Canada's CPI is an accurate indicator of the reality faced by Canadian consumers.

This debate has spilled over into the public forum, where there is a general lack of understanding about the CPI. Many Canadians do not understand how the CPI figure affects their day-to-day lives, and how it is used by decision-makers.

In response, Statistics Canada's Communications Branch has developed annual communications plans to counter negative narratives regarding Statistics Canada's methodology for calculating the CPI and to educate the general public in order to curb ongoing mis- and disinformation. The Communications Branch has worked in cooperation with subject-matter experts to deliver the agency's message that Statistics Canada's methodology to calculate the CPI is robust and meets internationally recognised statistical standards.

The annual communications plans include rollouts of announcements and strategies to promote the agency's messaging around the CPI. Additionally, the Communications Branch has developed a comprehensive set of "evergreen" key messages to be used by the media relations and speech writing teams.

Below are some areas in which there have been ongoing challenges:

Traditional Media

Through traditional media (such as op-eds), some critics have specifically advocated for different methodologies for calculating the impact of food, housing, and used car prices.

Agency Mitigation Strategies:

- The Communications Branch's media relations team continues to monitor traditional media sources regarding Statistic Canada's methodology for calculating the CPI. Where necessary, the agency engages traditional media to "detect and correct" egregious errors in reporting.
- The agency has also reached out directly to critics to address their public criticisms of the agency. The objective is to engage in a collegial conversation with the agency's critics, directly answer their criticisms regarding methodology, and address any concerns they may have.
- On 23 October 2022, the chief statistician of Statistics Canada appeared on a nationally broadcast news show, *Power and Politics*, to answer questions about the CPI.

Social Media

Reports on recent social trends show that the CPI releases have continued to garner much engagement in the social environment (social media and digital news media). Many users simply share facts from Statistics Canada's CPI monthly results, but there has also been an increasing number of social media users sharing negative commentary as inflation has increased.

Common concerns expressed on social media include:

- the growing food insecurity, gas prices, and overall cost of living
- distrust in Statistics Canada's calculations of the CPI, for example in comparison to the United States' inflation rates, or in comparison to consumer perceptions
- the impact of the inflation rate on the Bank of Canada's decision to raise interest rates
- a general politicisation of inflation and laying the blame on political parties, policies, or figures, for example, by linking inflation to carbon taxes or economic stimulus.

Agency Mitigation Strategies:

- Statistics Canada has been proactively engaging in social media using platforms such as Twitter, Facebook, and LinkedIn to convey its messages that the CPI is a robust and accurate methodology to track consumer costs as well as answer social media enquiries.
- On 23 June and 21 November 2022, the agency hosted "Ask Me Anything" Q&A events (Reddit AMA) allowing subject-matter experts to answer questions that Canadians had about the CPI, inflation, and the updates to the CPI basket.

This online event was a great opportunity to engage with an active online community on a topic that had been of interest to those on the platform. It was also an opportunity to engage with Canadians while answering their questions, addressing some of their concerns, as well as helping to expand data literacy and general public knowledge of how the CPI is calculated.

Political Environment

On 17 January 2022 and again on 31 March, 2022, Statistics Canada's chief statistician and senior management colleagues appeared in front of the the parliamentary House of Commons' Standing Committee on Finance (FINA) to discuss and answer questions about the CPI.

Some opposition members of parliament expressed doubt over the agency's methodology for calculating inflation, specifically the way in which the CPI accounts for shelter costs amid soaring home prices.

On 6 March 2023, Statistics Canada officials appeared at the House of Commons' Standing Committee on Agriculture and Agri-Food (AGRI) as part of a panel of witnesses in view of the committee's study of Food Price Inflation.

***Agency Mitigation Strategies*:**

- The Communications Branch continues to support our subject matter experts and help develop opening remarks and anticipated questions and answers.

5. Ireland Case Study — CPI: communication challenges

In common with other countries, Ireland experienced surging inflation rates throughout 2022 and early 2023 before these have fallen back in the latter part of 2023. This caused widespread public comment across traditional media, social media, the government, and the wider public. While there has been much comment and debate about the impact of inflation across society, there has been little, if any, about the validity of the CSO figures or its methodology.

Inflation rates in the energy and food and drink sectors are key drivers of the overall inflation rate, and both rates significantly exceed the monthly CPI rate. However, there has been little comment on the general experience of inflation being higher than the published rate. The CSO's CPI releases identify the main drivers and relevant rates as part of the key findings. The visibility of the higher rates in the releases may be a factor in the general public acceptance.

Messaging from utility and mobile phone companies

One challenge we have faced arises from communication between utility and mobile companies and their customers. A number of their websites have made reference to the CSO "setting" the inflation rates, and, when customers have complained about price increases, the companies' staff have referred them to the CSO as the "responsible" body. This caused an increase in calls and complaints from members of the public who were essentially blaming the CSO for the increased cost of their bills.

Remedial action by the CSO

We engaged with the companies, requesting them to ensure that any references to the CSO and the CPI on their websites referenced information published by the CSO rather than set rates. They were also requested to ensure that their staff were aware that the CSO only measures inflation and is not responsible for it.

The CSO put an explanation of how the CPI is calculated on its homepage with a link to an accompanying video explainer. https://www.cso.ie/en/releasesandpublications/in/cpi/informationnote-thecpicollectspricesbutdoesnotsetchargesappliedtocustomers/

There are still references to the CPI as the basis for price increases on several websites. However, it is now clearer that the companies are using the published rate rather than following any instruction or policy from the CSO.

The number of calls to our offices in relation to this issue has dropped significantly.