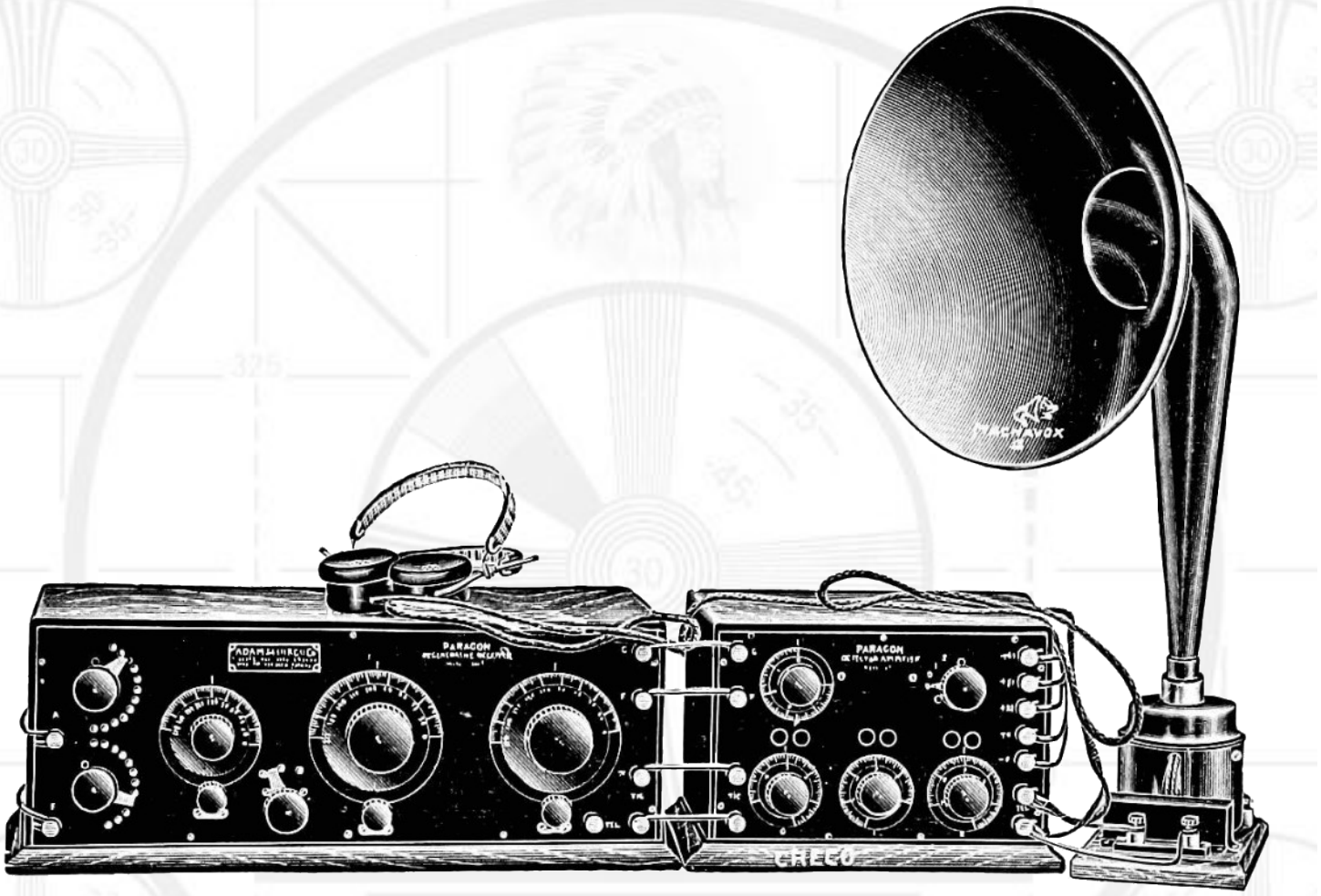
The Media Streaming Journal

July 2016



Covering Audio and Video Internet Broadcasting

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The Media Streaming Journal Staff

Derek Bullard
Publication Director
info@radiosolution.info

David Childers
Editor In Chief
editor@radiosolution.info

Advertising
advertising@radiosolution.info

www.radiosolution.info

Welcome to The Media Streaming Journal

Greetings,

Live multimedia broadcasts continue to take social media by storm. Facebook and Twitter have both incorporated the ability to stream live video embedded in individual accounts. Several social media applications designed for mobile devices have also included the ability to stream live video as well. This ability allows the capture and broadcast of any content imaginable. News, events, personal, entertainment, weather, etc.

The ability to live stream content from any location capable of supporting mobile device data transfer has made the average person both a news reporter as well as a broadcast media outlet. It will be interesting to see how this instant media distribution ability will play out in the future.

Please feel free to contact either the Publication Director (Derek Bullard) or myself if you have any questions or comments regarding The Media Streaming Journal.

Namaste

David Childers

www.linkedin.com/pub/david-childers/4/736/72a

The Grand Master of Digital Disaster
(Editor In Chief)

The Media Streaming Journal

What is in this edition of the Media Streaming Journal

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Competitive Business Intelligence

David Childers

The purpose of competitive business intelligence is to support business owners and management in gaining an understanding of their business market trends, general business market trends, consumer market trends and competition market trends.

Information specialists ensure that the competitive intelligence activities operate effectively and efficiently. They are the business management's primary advisers on employing information research assets and directing information collection. Competitive intelligence specialists also support their business management with analysis and production of reports based upon the collection of information. These reports provide timely, relevant, accurate, and predictive assessments that are tailored to the business management specific information needs. The reports also help business management visualize the current business environment, organize their assets, and control operations to achieve their financial objectives.

Decisions that affect the operation of the business are made on a frequent basis and include the following; advertising, promotion, product sales, store location and hours of operation. These decisions require factual information that is relevant and timely to provide the proper basis for making an informed decision. Basing business decisions on haphazard guesses or general assumptions can yield disastrous results that can lead to the loss of money.

Characteristics Of Effective Competitive Business Intelligence

Several key characteristics are necessary to ensure that a quality information research and collection operation is performed.

Accuracy

Competitive intelligence provides accurate, balanced, complete, and objective information.

Timeliness

Competitive intelligence provides current information that can be used to support existing or future operations.

Usability

Competitive intelligence should be available in the correct format required for storage, indexing, display and distribution.

Completeness

Competitive intelligence presents all necessary information to ensure that the final report is as complete as possible.

Precision

Competitive intelligence provides the required level of detail and complexity to satisfy the information needed.

Reliability

An evaluation must be performed on the Competitive intelligence to determine if it is trustworthy, uncorrupted, and undistorted.

Relevant

Competitive intelligence requires that the Competitive intelligence provide answers to the questions asked.

Tailored

Competitive intelligence should be shared and disseminated in the format requested by the end user. It needs to support and satisfy the specific requirements of the information operation.

Phases Of Competitive Business Intelligence Operations

Competitive intelligence information operations have successive stages that allow the researched information to be to be refined. This refined information can then be used to provide a quality product to the end user.

Planning

-Determine what information is needed.

-Determine which sources of information will be used.

Collection

- Designate the process for collecting the required information.

Processing

- Compile the collected information into a usable format for analysis.

Evaluation

- Evaluate information products for accuracy, completeness and intelligence information requirements.

Analysis

- Distill the evaluated information into a product that meets information requirements.

Production

- Format the information product, so that is readily accessible to the designated end user.

Distribution

- Distribute the information product to the designated end user.

Feedback

- Provide a peer-reviewed feedback of the final product. This will review the report for accuracy, completeness and information requirements.

Planning

Developing specific information requirements form the foundation for information collection planning. These requirements involve several processes including the following:

Participate In Planning

Throughout the planning phase, requirements are developed and refined. Some requirements are

consolidated, and others are discarded. Business management can add and delete individual requirements throughout a competitive intelligence operation based on the information requirements that are needed for specific decisions.

The development of requirements begins as early as possible, and the development of the requirements continues as the information specialist staff collects initial (baseline) information from existing sources and databases.

Maximum efficiency in competitive intelligence is achieved when all the collection tasks are carefully synchronized throughout an information collection operation. This formulation of collection tasks helps satisfy as many different requirements as possible. It also reduces the likelihood of the information specialist staff favoring or becoming too reliant on one source or research method.

Anticipate Requirements

The information specialist staff identifies new requirements or refines existing ones and present them to the business management for approval. The information specialist staff must recognize when and where to shift collection assets and make timely recommendations to the business management. Anticipating and developing new requirements requires a detailed understanding of the business and its operational capabilities. It also requires a thorough knowledge of existing information holdings.

The ability to anticipate competitive intelligence requirements gives the information specialist staff additional time to plan the use of collection assets. It requires a seamless involvement with the competitive intelligence operation planners and business management. Anticipating upcoming requirements allows the information specialist staff to communicate with business management and plan future requests for information. When more lead time is given to information specialist personnel, it is more likely they can obtain the required support for a specified time frame. A good example is forecasting additional support needed during critical events, such as business promotion or advertising campaigns.

Analyze Requirements

The information specialist staff analyzes requirements to determine the most efficient use of information collection assets. Each requirement is analyzed to determine how best to satisfy it. Often, a newly received requirement can be satisfied by submitting a request for information. Analyzing requirements involves separating, recording, validating, consolidating and prioritizing each recommended requirement.

Refine Requirements

The development of information requirements does not end with the business management approval of the information specialist request. Each requirement is further broken down into groups and indicators by the information specialist staff. This facilitates matching requirements to collection asset capabilities while developing the planning requirement tools.

Collection

This is the systematic exploitation of information sources to satisfy specific information requirements. Information collection encompasses assembling relevant information from sources that are already on hand or available from other sources such as Open Source Intelligence. The collected information is then submitted for processing. Activities that are carried out during the execution of collection operations include directing assets to sources that are favorable for satisfying information collection objectives.

Information is collected from a variety of research assets or sources, each with unique capabilities and limitations. The value of a collection source is not necessarily related to the sophistication or cost of that source, but rather to its ability to gather pertinent data from the collection target. Successful information research operations require access to data from all types of collection resources. It is important to collect data from all suitable and capable assets, balancing the capabilities of one type of collection method against the limitations of another to provide “all-source” data input to the processing phase.

A failure to exploit every source of information may deny access to important information. The difficulties involved in obtaining adequate information and in arriving at reliable conclusions are many; thus it is important to exploit every possible information source that is available. The collection of information must be organized to provide speed and economy of effort. The necessity for accurate and complete information required by operational planning is of prime importance.

Processing

Processing the collected information allows the raw data to be transcribed, evaluated and analyzed. Processing provides information that can be used to create a comprehensive competitive intelligence report.

Information processing consists of three steps, which include:

Transcription

This consists of the conversion of collected information into a suitable form that can be readily used to produce competitive intelligence. Transcription includes data from conversion, photographic development, and translation of foreign language material.

Evaluation

This consists of determining the relevance of the information, the reliability of the source, and accuracy of the information.

Filtering

This consists of discarding irrelevant or repetitive information.

Analysis

This consists of developing intelligence through the evaluation, assessment, integration, and interpretation of the collected information. The results of the analysis attempt to answer the questions posed in the planning stage.

Synthesis

This consists of piecing together different information and creating a coherent, meaningful, and organized perspective. It is based on an ongoing or previous analysis of various pieces of information and events. The synthesis of information determines the relationships that exist between the collected information rather than simply pulling it together.

The processing of information is a continuous operation. The information specialist processes new information as it is received without waiting for additional information. Competitive intelligence derived from fragmentary information is essential, particularly during fast-moving business operations. Normally there is a time lag between the time of a planned business function occurring and the time the information becomes available so that the business management can react to it. Complete information about a target or a situation is seldom available. The information specialist continuously identifies information gaps and attempts to acquire information to complete, confirm, or refute fragmentary information. This acquired information must provide the business management with the ability to generate and apply business operational capacity. This helps the business management to achieve and retain the objective or initiative.

Evaluation and Interpretation

Items of information that have been transcribed and categorized must be subject to a review. This review should consist of a critical and systematic analysis to convert the information into data that can be used in the finalized report for the competitive intelligence document. This evaluated data must be

free from irrelevant matter and ready for immediate use.

Evaluation

This is the determination of the probable value of the information. The following factors should be considered when evaluating the information.

Clarity Of The Source

- Is the source of the information clear in the presentation of the facts.
  (Hidden meanings can be a double edged sword.)

Credibility Of The Source

- Is the source of the information accurate.

- Is the source of the information reliable.

Accuracy Of The Information

- Is the information confirmed or corroborated by other sources deemed as reliable.

Significance Of The Information

- Is the information new or a confirmation of previous information.

- Is the information needed immediately or does it have probable future value.

Relevance Of The Information

- Does the information completely answer the questions posed.

The Quality Of The Information

- Does the information provide the necessary detail for answering the questions posed.

Interpretation

This is the ability to determine the possible significance of evaluated information together with conclusions of its importance.

- What does the information mean in connection with what is already known.

- Does the information alter or add significance to existing information?

- Does the information tend to confirm the estimate of the situation; or does it change the assessment?

  * How is the assessment of the situation changed If the information does change the estimate of the situation?

Analysis

Information has a story to tell, and it can provide answers to questions. Analysis involves the application of reason and logic to find the answers inside information that has been collected.

Analytical Theories

Most analytical theories begin with a proposition or premise. These theories act as a statement that may or may not be true.

Proposition Or Premise

This is a combination of evidence and assumptions which establishes the foundation for an argument, hypothesis, or conclusion.
Propositions can be categorized in several ways, which include:

* Detailed

  Specific information.

* Abstract

  An idea without having a physical or concrete information to back it up.

* Observable

  Observed or documented information.

* Inferable

  Conclusive information derived from multiple sources.

Certainty And Fuzziness

Propositions have varying degrees of both certainty and fuzziness.

* Certainty is the degree of belief in something.

* Fuzziness is the measure of how well the known information matches the desired information.

Apriori

This is a probability, in the absence of other information.

Applied Logic

Intelligence typically deals with obscure data, and few facts, which can limit the information specialist's ability to apply formal logic in information analysis. There are, however, areas of applied logic that are most relevant to information analysis.

Facts

A fact is a statement that has been demonstrated to be true.

Opinions

When facts are unavailable, an analyst might use opinions. An opinion is what someone believes to be true, but it may or may not be true.

Inferences

Inferences are conclusions drawn from facts and or opinions.

Reasoning

This is the mental process that is used to study facts, opinions, and inferences. Analysts solve problems through deductive and inductive reasoning.

Deductive

The process of drawing conclusions from one or more propositions or premises.

Inductive

The process of arriving at conclusions based on evaluating facts or inferences.

Tests Of Truth

Both inductive and deductive reasoning involves three basic tests of truth that information specialist employ to determine the truth of propositions.

Correspondence Test Of Truth

This test holds that the truth is a statement that corresponds to reality.

Coherence Test Of Truth

This test uses consistency with other ideas or facts to validate statements. Where direct access to the information objective is denied, the coherence test of truth becomes necessary. The coherence theory refers to how consistent different pieces of information are in relation to each other.

Pragmatic Test Of Truth

This test proposes that a given statement is true if it works in practice.

Production

The production of a competitive intelligence report requires the integration of all analyzed information into a comprehensive product for the end user. The product must be created in a usable format, and it must contain all the information initially required by the planning. It is critically important to ensure that the product is timely, accurate, and tailored to information requirements of the business. Information specialists must strive to provide knowledge that includes the following:

- References to justify opinions derived from analysis.

- Graphics to assist with the presentation of data when possible.

- Language that is technically comprehensive but is easily understood.

- Concise presentation of information.

Distribution

Competitive Intelligence reports must be delivered to the proper individual or department in a timely manner so the information does not become outdated and useless.

Determining which method to be used in the distribution of the product is a function of several factors, which include:

- The purpose of the intelligence product.

- The urgency and relevance of the intelligence to ongoing business operations.

- The type and volume of the intelligence.

- The user’s capability to receive intelligence products.

- The distribution means available.

The competitive intelligence report can be typically delivered using several methods, which include:

- Personal contact.
- Conferences.
- Courier delivery.
- Electronic means.

Peer Review

A peer review is intended to uncover any technical problems or unresolved issues through the use of independent experts. It also ensures that the competitive intelligence operation activities are technically adequate, competently performed, properly documented, and satisfy established quality requirements. This information is then used to improve the competitive intelligence report so that it will reflect sound technical information and analyzes. It is conducted by qualified individuals who are independent of those that originated the work, but who are collectively equivalent in technical expertise (i.e., peers) to those who created the original work.

The peer review is an in-depth assessment of the assumptions, calculations, extrapolations, alternate interpretations, methodology, acceptance criteria, and conclusions pertaining to a specific scientific and/or technical work product. This process also includes the documentation that supports the work product. Peer review may provide an evaluation of a subject where quantitative methods of analysis or measures of success are unavailable or undefined; such as research and development.

A Peer Review Record is the formal record of decision on the conduct of the peer review, and an explanation of how the peer review comments were addressed. It includes sufficient documentation for an uninvolved person to understand what actually happened and why. The Peer Review Leader (with the program manager if there is one) creates a separate, clearly marked peer review file section within the overall file for development of the work. Once the peer review is completed, it is the responsibility of the Peer Review Leader to ensure that the peer review record is filed and maintained with the content that is reviewed.

The peer review record should include all materials considered by the individual peer reviewers of the peer review panel, as well as their written comments and other input.

When deciding if particular materials should be included in the record, the Peer Review Leader should consider whether the materials would help reconstruct the peer review process and results at a later time. If the materials may be helpful, they should be part of the peer review record.

The distinguishing characteristics of peer review include:

Rigorous

Peer review asks the questions that the information specialists and their management must know to make good decisions.

Formal And Documented

Peer reviews follow prescribed phases and general steps. The process is transparent so that other peers can follow the reasoning from the questions and the discussion of the results and recommendations.

Objective Criteria

The evaluation criteria, data examined, and definition of evidence provided by specification of that criteria are the standards for judging a program or project. Criteria are specified prior to the review.

Qualified And Independent Reviewers

In addition to being experts in the subject matter, significant relationships with the program are fully disclosed, and the reviewers are not so tied to the program that they would be widely perceived to provide biased opinions.

Judgments

Views provided are related to objective evaluation criteria and associated questions established for the review.

The peer review should concentrate on the following:

- Accuracy.
- Completeness.
- Analysis of content.
- Analysis conclusions.
- Content used.
- Content collection methodology used.
- Sources used.

Additional Reading

Army Techniques Publication 2-22.9
Open-Source Intelligence
July 2012
Department of the Army Headquarters
United States Government

Training Circular 2-33.4
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August 2014
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Untangling The Web
An Introduction To Internet Research
February 2007
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Guide to Effective Searching of the Internet – 2005
Michael K. Bergman
December 2004
BrightPlanet Corporation

The Extreme Searcher's Internet Handbook
A Guide for the Serious Searcher
Randolph Hock
November 2013
Independent Pub Group

Google Guide - Making Searching Even Easier
Nancy Blachman & Jerry Peek
February 2012
www.googleguide.com

Hacking Web Intelligence
Open Source Intelligence and Web Reconnaissance
Concepts and Techniques
Sudhanshu Chauhan & Nutan Kumar Panda
April 2015
Elsevier Publications

Google Search Secrets
October 2013
Christa Burns & Michael P. Sauers
American Library Association

all-free-download.com/free-vector/download/magnifying_glass_clip_art_23181.html

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http://television.scenicradio.com

Audio Line level

Line level represents the specified strength of an audio signal used to transmit analog sound between audio components such as CD and DVD players, television sets, audio amplifiers, and mixing consoles.

There are weaker audio signals as opposed to line level. These include signals from microphones and instrument pickups, and stronger signals, such as those used to drive headphones and loudspeakers. The "strength" of these various signals does not necessarily refer to the output voltage of the source device; it also depends on its output impedance and power output capability.

Overview

Consumer electronic devices concerned with audio (for example sound cards) often have a connector labeled line in and line out. Line out provides an audio signal output and line in receives a signal input. The line in and out connections on consumer-oriented audio equipment are typically unbalanced, with a 3.5 mm (1/8 inch) 3-conductor TRS mini-jack connector. These provide a ground, a left channel, and a right channel. Professional equipment commonly uses balanced connections on 6.5 mm (1/4 inch) TRS phone jacks or XLR connectors. Professional equipment may also use unbalanced connections with (1/4 inch) TS phone jacks.

Nominal levels

Voltage vs. time of sine waves at reference and line levels, with VRMS, VPK, and VPP marked for the +4dBu line level.

A line level describes a line's nominal signal level as a ratio, expressed in decibels, against a standard reference voltage. The nominal level and the reference voltage against which it is expressed depend on the line level being used. While the nominal levels themselves vary, only two reference voltages are common: decibel volts (dBV) for consumer applications and decibels unloaded (dBu) for professional applications.

The decibel volt reference voltage is 1 VRMS = 0 dBV. The decibel unloaded reference voltage, 0 dBu, is the AC voltage required to produce 1 mW of power across a 600 Ω impedance (approximately 0.7746 VRMS).[2] This awkward unit is a holdover from the early telephone standards, which used 600 Ω sources and loads, and measured dissipated power in decibel-millivolts (dBm). Modern audio equipment does not use 600 Ω matched loads, hence dBm unloaded (dBu).

The most common nominal level for consumer audio equipment is −10 dBV, and the most common nominal level for professional equipment is +4 dBu (by convention, decibel values are written with an explicit sign symbol).

Expressed in absolute terms, a signal at −10 dBV is equivalent to a sine wave signal with a peak amplitude (VPK) of approximately 0.447 volts, or any general signal at 0.316 volts root mean square (VRMS). A signal at +4 dBu is equivalent to a sine wave signal with a peak amplitude of approximately 1.736 volts, or any general signal at approximately 1.228 VRMS.

Peak-to-peak (sometimes abbreviated as p-p) amplitude (VPP) refers to the total voltage swing of a signal, which is double the peak amplitude of the signal. For instance, a signal with a peak amplitude of ±0.5 V has a p-p amplitude of 1.0 V.

Line levels and their approximate nominal voltage levels:

Use	Nominal level	Nominal level, V_{RMS}	Peak amplitude, V_{PK}	Peak-to-peak amplitude, V_{PP}
Professional audio	+4 dBu	1.228	1.736	3.472
Consumer audio	−10 dBV	0.316	0.447	0.894

The line level signal is an alternating current signal without a DC offset, meaning that its voltage varies with respect to signal ground from the peak amplitude (for example +1.5 V) to the equivalent negative voltage (−1.5 V).

Impedance

As cables between line output and line input are generally short compared to the audio signal wavelength in the cable, transmission line effects can be disregarded, and impedance matching need not be used. Instead, line level circuits use the impedance bridging principle, in which a low impedance output drives a high impedance input. A typical line out connection has an output impedance from 100 to 600 Ω, with lower values being more common in newer equipment. Line inputs present a much higher impedance, typically 10 kΩ or more.

The two impedance measurements form a voltage divider with a shunt element that is large relative to the size of the series element, which ensures that little of the signal is shunted to ground and that current requirements are minimized. Most of the voltage asserted by the output appears across the input impedance, and almost none of the voltage is dropped across the output. The line input acts similarly to a high impedance voltmeter or oscilloscope input, measuring the voltage asserted by the output while drawing minimal current (and hence minimal power) from the source. The high impedance of the line in a circuit does not load down the output of the source device.

These are voltage signals (as opposed to current signals), and it is the signal information (voltage) that is desired, not power to drive a transducer, such as a speaker or an antenna. The actual information that is exchanged between the devices is the variance in voltage; it is this alternating voltage signal that conveys the information, making the current irrelevant.

Line outputs usually present a source impedance of from 100 to 600 ohms. The voltage can reach 2 volts peak-to-peak with levels referenced to −10 dBV (300 mV) at 10 kΩ. The frequency response of most modern equipment is advertised as at least 20 Hz to 20 kHz, which corresponds to the range of human hearing. Line outputs are intended to drive a load impedance of 10,000 ohms; with only a few volts, this requires only minimal current.

Connecting other devices

Connecting a low-impedance load such as a loudspeaker (usually 4 to 8 Ω) to a line out will essentially short-circuit the output circuit. Such loads are around 1/1000 the impedance a line out is designed to drive, so the line out is usually not designed to source the current that would be drawn by a 4 to 8 ohm load at a normal line out signal voltages. The result will be very weak sound from the speaker and possibly a damaged line out circuit.

Headphone outputs and line outputs are sometimes confused. Different make and model headphones have widely varying impedance measurement, from as little as 20 Ω to a few hundred ohms. The lower impedance rating will have results similar to a speaker. The higher impedance rating may work if the line out impedance is low enough and the headphones are sensitive enough.

Conversely, a headphone output typically has a source impedance of only a few ohms (to provide a bridging connection with 32 ohm headphones) and will easily drive a line input.

For similar reasons, "wye"-cables (or "Y-splitters") should not be used to combine two line out signals into a single line in. Each line output would be driving the other line output as well as the intended input, again resulting in a much heavier load than designed for. This will result in signal loss and possibly even damage. An active mixer, using for example op-amps, should be used instead. A large resistor in series with each output can be used to mix them safely together, but must be appropriately designed for the load impedance and cable length.

Line in

It is intended by designers that the line out of one device be connected to the line input of another. Line inputs are designed to accept voltage levels in the range provided by line outputs. Impedance is

deliberately not matched from output to input. The impedance of a line input is typically around 10 kΩ. When driven by a line output's usual low impedance of 100 to 600 ohms, this forms a "bridging" connection in which most of the voltage generated by the source (the output) is dropped across the load (the input) and minimal current flows due to the load's relatively high impedance.

Although line inputs have a high impedance compared to that of line outputs, they should not be confused with so-called "Hi-Z" inputs (Z being the symbol for impedance) which have an impedance of 470 kΩ to over 1 MΩ. These "Hi-Z" or "instrument" inputs typically have higher gain than a line input. They are designed to be used with, for example, electric guitar pickups and "direct injection" boxes. Some of these sources can provide only minimal voltage and current and the high impedance input is designed not to overload them.

Line level in traditional signal paths

Acoustic sounds (such as voices or musical instruments) are often recorded with transducers (microphones and pickups) that produce weak electrical signals. These signals must be amplified to line level, where they are more easily manipulated by other devices such as mixing consoles and tape recorders. Such amplification is performed by a device known as a preamplifier or "preamp", which boosts the signal to line level. After manipulation at line level, signals are then typically sent to a power amplifier, where they are amplified to levels that can drive headphones or loudspeakers. These convert the signals back into sounds that can be heard through the air.

Most phonograph cartridges also have a low output level and require a preamp; typically, a home stereo integrated amplifier or receiver will have a special phono input. This input passes the signal through a phono preamp, which applies overall equalization to the signal as well as boosting it to line level.

It is important to understand the concepts of audio levels for audio equipment. Proper audio levels will ensure that a broadcaster provides an enjoyable listening experience for the audience.

https://en.wikipedia.org/wiki/Line_level

Broadcasting World

http://www.broadcastingworld.com

Your global community for broadcasting.

Audience Analysis

Audience analysis involves gathering and interpreting information about the recipients of oral, written, or visual communication. Defining an audience requires the consideration of many factors, such as age, culture, and knowledge of the subject. After considering all the known factors, a profile of the intended audience can be created, allowing writers to write in a manner that is understood by the intended audience.

The analysis of an audience consists of assessing the audience to make sure the information provided to them is at the appropriate level. The audience is often referred to as the end-user, and all communications need to be targeted at this group. This is a task that is often completed in a project's early stages.

There are numerous methods that a technical communicator can use to conduct the analysis. Because the task of completing an audience analysis can be overwhelming, using multiple approaches to conducting the analysis is recommended by most professors, often yielding improved accuracy and efficiency. Michael Albers suggests that an analysis uses several independent dimensions that work together, such as reader knowledge of the topic and reader cognitive ability.

Writers can also use conversation to help them to complete an audience analysis. Conversation allows the communicator to consider the multiple cultural, disciplinary, and institutional contexts of their target audience, producing a valuable audience analysis.

David L. Carson of the Rensselaer Polytechnic Institute asserted that technical communicators most often perform their jobs with little or no knowledge about their audience. As a result, audience analyses address a fictional audience. Carson asserts that the communicator's image of any particular audience is a figment of the communicator's imagination. Ideally, the technical communicator would be able to control a project from inception through dissemination. Carson states that the analysis should include a reader's level of comprehension of the technical vocabulary and motivation, as well as reading level. Indicators of a reader's high level of motivation include high interest in the subject matter, relatively high knowledge of the content, and high personal stakes in mastering the information.

Another technique used to conduct an audience analysis is the "bottom-up" approach. Leon de Stadler and Sarah van der Land explore this type of approach about a document produced by an organization that develops different kinds of interventions in the field of HIV/AIDS education. This particular document focused on the use of contraception and targeted the black youth of South Africa. The initial document was created by document designers in the United States who did not base their design on an extensive audience analysis. As a result, the document, which used the informal slang of black South African youth, did not effectively communicate with its target audience. After the dissemination of the document.

Van der Land used focus groups and interviews of a sample of the target audience to discover what improvements should be made. Upon considering the audience's perspective, she found that the initial document's use of the hip-style language backfired. The interviewees indicated that the use of the popular language was not effective because it was not used correctly or consistently throughout the document. Additionally, to the target audience, the informal language did not fit the seriousness of the topic being discussed. The suggested "bottom-up" approach should have incorporated the target audience during the design process instead of as an afterthought. Most technical communicators approach an audience analysis from the "top-down," which usually ignores the vital input from the intended audience. The authors of this article acknowledge the potential cost of time and money that the "bottom-up" approach presents; however, they believe that the time and money would be best spent on the production of a quality, document than spent on attempting to rectify the production of a bad design.

Marjorie Rush Hovde discusses more tactics that can be implemented in the process of an audience analysis about one's organization. She suggests talking with users during phone support calls, interacting with users face-to-face, drawing on the writer's personal experiences with the software and documentation, interacting with use-contact people within the organization, studying responses sent from users after the documentation is released, and conducting internal user-testing. Like Michael

Albers, Hovde asserts that the use of a combination of tactics proves to produce a more accurate audience analysis than using one tactic alone.

Karen D. Holl discusses what writers should consider when writing papers that address an international audience. She focuses on those writers who attempt to publish studies in publications that are circulated abroad. She suggests that these writers consider the several questions when framing their papers. These questions include: What conclusions from my study would be relevant and novel to land managers and scientists working in other ecosystems and socio-economic contexts? What is the geographic scope of the literature I am citing? To which ecological and socio-economic systems do my world view, and results apply? Is my study sufficiently well replicated to generalize my results? Are my conclusions supported by my data? Is all my data necessary to support my conclusions? Although she focuses her suggestions on scientific studies, she acknowledges that "what is necessary to effectively communicate the results of any study is to consider what conclusions will be of most interest to the target audience." Holl concludes that knowing how to address an international audience is a vital skill that successful scientists, as well as technical communicators, must possess.

Depth of analysis

There are often a large number of factors to consider, thus making it hard for the writer to completely assess the target audience within a reasonable amount of time. Therefore, an attempt to reach the most accurate and effective audience analysis, promptly, is vital to the technical communication process. The depth of the audience analysis also depends on the size of the intended audience.

Because people constantly change regarding technological exposure, the audience to be analyzed constantly changes. As a result, the technical communicator must consider the possibility that their audience changes over time. An article in the European Journal of Communication examined the change audience research has experienced due to the growing range of information and communication technologies. The article pointed out that there are three primary challenges that drive the search for methodological rigor: the difference between what people say they do and what they do in practice, the interpretation of the text by the reader, and why the received meanings of television matter in everyday life. An exact audience analysis is nearly impossible to create, and it is similarly difficult to create an analysis that is relevant for a long period of time. Revising and rewriting an audience analysis is often required to maintain the relevance of the analysis.

Specific applications of audience analysis

R. C. Goldworthy, C. B. Mayhorn and A. W. Meade dealt with the hazard mitigation, including warning development, validation, and dissemination as an important aspect of product safety and workplace and consumer protection in their article "Warnings in Manufacturing: Improving Hazard-Mitigation Messaging through Audience Analysis". In this study, they focused on the potential role of latent class analysis in regards to the audience analysis performed in hazard communication and warning messages. Their qualitative study involved 700 adult and adolescent participants who answered a structured questionnaire about prescription medication history, prescription medication loaning/borrowing history, and a likelihood of sharing/borrowing medication.

With this information, four latent classes were identified, These classes are 1) Abstainers, 2) Pragmatic frequent sharers, 3) At-risk sharers, and 4) Emergency sharers. The identification of latent classes based on behaviors of interest facilitated tailoring hazard mitigation efforts to specific groups. Although their study is limited, in that all participants were between the ages of twelve and forty-four and were from a heavily populated urban area (so the generalization of the data to rural settings has not been generated), this study establishes that latent class analysis can play a vital role. They conclude that latent analysis is a worthwhile addition to the analytical toolbox because it allows, in this case, risk reduction and hazard mitigation efforts to tailor interventions to a diverse target audience. For the technical writer, analyzing latent classes would enable them to achieve a better identification of homogenous groups within the broader population of readers and across many variables to tailor messages to these better-specified groups.

The population of older adults is growing, and Gail Lippincott asserts that technical communicators have not accounted for the needs of these audiences, nor drawn from the wide range of research on aging. In

her article "Gray Matters: Where are the Technical Communicator in Research and Design for Aging Audiences?", Lippincott suggests four challenges that practitioners, educators, and researchers must undertake to accommodate older adults' physical, cognitive, and emotional needs: They must refine the demographic variable of age, and average user age to enrich current methods of audience analysis. They must also investigate multidisciplinary sources of aging research, and participate in research on aging by offering our expertise in document design and communication strategies. Lippincot acknowledges that there is so much more research that must be done in this area, for "the body of literature on older adults and computer use is relatively small." Lippincott provides insight into an often overlooked audience that technical communicators must learn to address.

Teresa Lipus argues that devoting company resources to produce adequate instructions for international users is both practical and ethical. She also provides a brief overview of the consumer protection measures that leading U.S. trade partners have implemented. She also presents the following guidelines for developing adequate instructions for international audiences: 1) define the scope of the instructions, 2) identify the audience, 3) describe the product's functions and limitations, 4) identify the constraints, and 5) use durable materials. She offers tips for getting and keeping the attention of the audience. These tips are 1) organize the information, 2) structure the information, and 3) design the page layout.

For aiding the comprehension of the readers, Lipus suggests that technical communicators write readable texts and design effective graphics. To motivate compliance, she says to make the instructions relevant and credible and to improve user recall of the information by organizing the information into small but meaningful groups and providing concise summaries and on-product reminders. When presenting safety information, Lipus states one should not only include the necessary safety messages but also to design effective safety messages. Before distributing instructions, they must be evaluated. She recommends testing the product and the accuracy of the instructions, communicating using means that reach users and continuing to test and to inform users even after marketing. She explains that because the potential for making subtle but offensive errors is so high in international dealings, a language-sensitive native speaker from the target culture should always review the instructions before they are distributed to consumers.

Jenni Swenson, Helen Constantinides, and Laura Gurak, in their case study, address the problem of defining medical website credibility and identifying the gap in web design research that fails to recognize or address specific audience needs in website design. The information they gathered assisted the researchers in identifying and fulfilling specific audience needs, describing a framework, and presenting a case study in audience-driven Web design. The researchers used the qualitative method of conducting a survey to find the audience of the Algenix, Inc. Web site. Algenix is a biomedical liver disease management company. The study showed that an audience-driven design would do more to reassure the audience that personal information would not be collected without consent as well as provide clear policies of security, privacy, and data collection. The survey informed the researchers that the audience would also like to experience a site with minimal graphics and short download times and one that is intuitive and easy to navigate. This study illustrates how an audience analysis should not only address what the users can do but also what they, as the users, would prefer.

In the article "Real Readers, Implied Readers, and Professional Writers: Suggested Research", Charlotte Thralls, Nancy Ror, and Helen Rothschild Ewald of Iowa State University define "real readers" versus "implied readers". The real reader is a concrete reality and determines the writer's purpose and persona. A writer who perceives an audience as real tends to conceive of readers as living persons with specific attitudes and demographic characteristics. Therefore, the writer's task is to accommodate the real reader by analyzing this reader's needs and deferring to them. The implied reader, on the other hand, is a mental construct or role which the actual reader is invited to enter, even though the characteristics embodied in that role may not perfectly fit his or her attitudes or reactions. When the reader is implied, the writer invents and determines the audience within the text. The researchers assert that writers must appreciate the complex interplay that may take place between the real and implied representations of the reader in every document.

It is important to understand the concepts behind audience analysis. Research, implementation, and timely data collection are important for identifying key traits within within audience information.

https://en.wikipedia.org/wiki/Audience_analysis

Turbo Charging LibreOffice

Robert Andrews

LibreOffice is the most actively developed open source office software application available today. It is free software and is a project of The Document Foundation. The LibreOffice suite is comprised of programs for word processing, the creation and editing of spreadsheets, slide shows, diagrams and drawings, working with databases, and composing mathematical formula. You can use LibreOffice to create station promotional flyers, business proposals, PDF fact sheets and business spread sheets with this amazing software.

You can give your version of LibreOffice a jump start with these fantastic add-ons, if you are using Debian Linux or another form of Linux.

Add-ons

This extension provides an English language thesaurus for LibreOffice.

$ apt-get install myspell-en-us

A library of license-free, royalty-free, and restriction-free images that can be used for any purpose.

$ apt-get install openclipart-libreoffice

Additional fonts

$ apt-get install ttf-dejavu

$ apt-get install texlive-fonts-extra

$ apt-get install ttf-mscorefonts-installer

$ apt-get install ttf-bitstream-vera

$ apt-get install ttf-liberation

Additional fonts

Additional fonts can be downloaded from here:

http://fonts.debian.net/

Libreoffice accesses available system fonts from this location on the computer system :

→ /usr/share/fonts/

Grammark

This online tool helps to find things that grammarians consider bad, highlights them, and suggests improvements.

http://www.grammark.org

Language tool

This extension detects spelling and grammar errors.

http://www.languagetool.org/

Deadline extension

This extension checks grammar, style, and misused words.

http://www.afterthedeadline.com/download.slp?platform=OpenOffice