Your Personal And Confidential Information In Braille:

What Goes On Behind The Scenes To Make It Happen?

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Introduction

Since the invention of braille nearly 200 years ago there have been many changes to the way in which it is produced. All of these methods have one thing in common – they all require some form of manual intervention by the transcriber. However, this is not the case for the transcription of transactional material. In this paper I will examine the processes and challenges involved in transcribing personal and confidential information such as banking and credit card statements, telephone bills and information pertaining to financial investments and health insurance. I will define relevant terms (e.g. manual and automated braille transcription) and then address the issues involved in transcribing high volumes of personal and confidential (transactional) information within tight deadlines.

Braille adds some unique challenges to the mix, but with legislation being enacted around the world (of which I will provide some examples), more and more of our personal and confidential information will be made available in braille. Therefore, it is important for braille users to understand the processes involved in converting this kind of information into braille.

With these issues in mind I will discuss the need for formalized guidelines to ensure consistency amongst organizations who produce accessible transactional documents. As this is a relatively new aspect of braille transcription, such guidelines do not currently exist. However, Braille Literacy Canada (BLC) has established a committee to develop guidelines for the transcription and production of transactional material, and I will include an overview of the topics addressed in these guidelines. The transcription of personal and confidential information affects anyone who has a bank account, a credit card or a cell phone and wants to access their bills and statements in braille.

Setting The Stage: Legislation

Thankfully for those of us who use braille and other alternate formats, many countries have enacted legislation related to document accessibility. Some examples are as follows:

* Canada: Accessibility for Ontarians with Disabilities Act (AODA)
* United States: Americans with Disabilities Act (ADA)
* United Kingdom: Equality Act
* Australia: Disability discrimination Act (DDA)

Several other countries have already adopted similar legislation, or are in the process of doing so. The result is that more and more organizations are realizing that they need to make document accessibility a priority. For more detailed information on this type of legislation please see the “References” section at the end of this paper.

What Is Transactional Material?

This term refers to information that you would receive in a banking or credit card statement, a phone bill or insurance documentation. Transactional material is personal and confidential in nature. It varies from individual to individual and from statement to statement. Here are some issues to consider:

* Privacy: If you don’t receive this information in an accessible format you may have to ask a friend or family member to read it to you. Consequences range from relatively minor (your sister finds out what you got her for Christmas) to major (someone you thought you could trust gains access to your personal banking information, resulting in fraud).
* Timeliness: If your phone bill must be paid on the 15th and you don’t receive it until the 18th you would be penalized for late payment of your bill.
* Level of detail: This is the kind of information where an extra zero or an incorrect decimal point can make a huge difference, whether it pertains to your balance owing or a refund to which you are entitled.
* Service Level Agreements and Turnaround times: Transactional documents are produced in high volumes with very tight turnaround times, often within 24 to 48 hours of receipt of the original files.
* Security: Financial institutions, as well as telecommunications and insurance companies, are governed by legislation protecting the personal and confidential information of their clients. Producers of transactional documents in accessible formats must adhere to the same regulations. In a sense these producers become the entity for whom they provide transcription services. Please see the “References” section at the end of this paper for a list of pertinent legislation.

Conventional Print Statements

The conventional print version of your statement or bill is not designed with document accessibility in mind. The information is presented in a columnar format, and it probably contains mixed fonts, colours and shading. Pie charts, graphs and images are often used to convey transactional information and marketing messages. An understanding of the process for compiling conventional print statements is helpful when examining the challenges of braille transcription of these documents.

* Transactional information on goods and services purchased is captured throughout the month.
* Information is then summarized and details are merged into a form.
* Special messaging is added (such as non-sufficient funds, overdraft etc.).
* Terms and conditions tailored to the product for which the bill or statement is provided.
* Marketing messages are added.
* High-speed printers render and print these statements for millions of customers daily.
* Special inserts specific to your profile or your demographic are added.
* These statements are then inducted into the mail system for delivery.

This process ensures that the end user gets his or her own information and not someone else’s. Furthermore, since the whole process is automated the potential for error is drastically reduced.

Manual Versus Automated Transcription

Before discussing the challenges of producing conventional print statements in braille, it is important to understand what is meant by manual and automated transcription. Normally when we think of manual transcription the slate and stylus or a Perkins brailler would come to mind. However, manual transcription also includes software such as the Duxbury Braille Translator and Braille 2000. The reason for this is that even though a program like Duxbury does many things automatically, intervention by a transcriber is still required. This is not a drawback in any way. It allows for a great deal of precision when converting print into braille, which is an invaluable feature of these programs.

Manual transcription is best suited to static material, which can be anything from a textbook to a restaurant menu. Brochures, train schedules and user manuals would also fall into this category. Static documents do not contain personal and confidential information such as that which is found in transactional material, nor does the content change on a regular basis. However, they can be very time-consuming – and therefore expensive – to produce. Throughout the transcription of static documents the transcriber has a certain amount of control over the content.

Automated transcription, on the other hand, is achieved by means of an application developed specifically for a given brand and statement type. The automated system extracts the text and applies braille rules based on the language of the document and whether contracted or uncontracted braille is required. In this way a large number of statements can be transcribed simultaneously, saving both cost and time. The application converts each file with no human intervention. These applications can also convert statements to accessible PDF, large print, audio and e-text. As with conventional print statements, the automation of the process greatly reduces the potential for human error.

What Does All Of This Mean For Braille Statements?

To begin with, there is no certified transcriber making modifications to your statement. Because of this, the braille output is dictated by the input received and the automated tool converting the original into braille. Perhaps the most practical way to illustrate this is in the case of truncated information.

When the conventional print statement is generated the transactional details are entered into fields with predetermined character lengths. This is why, when you make an online purchase you will be told how the seller will appear on your statement. Otherwise, you might not recognize the item. New York might appear as Newyo and Shopper’s DrugMart as Shoppedrug. This can result not only in odd misspellings but also in imperfect use of braille contractions. Another example is that punctuation and symbols – such as the dollar sign or asterisk – are not always properly spaced.

Anyone who is familiar with braille recognizes that there are contexts where code or formatting rules require human or manual intervention in order to be applied correctly. In the automated transcription process this intervention is not possible. I am not referring here to errors that lead to ambiguity of content. Anything that affects the readability of the information must be resolved in the application by the developers.

Another consequence of the automated process is that if the original document is convoluted and difficult to follow, the braille version will be the same.

Transactional Document Guidelines

Automated transcription and the provision of transactional documents in braille are both relatively new developments. As a result, there are currently no guidelines for producers to follow that specifically address the challenges of transcribing this kind of information. One reason this is problematic is that it leads to inconsistency. With no formalized guidance available, producers must make their own decisions when handling issues unique to automated transcription. This, in turn, means that producers do not necessarily have a mechanism they can use to defend their decisions. Nor do customers have a relevant standard with which they can expect producers to comply. This is not to say that transactional material now being produced is not of good quality, but there is room for improvement. A set of formalized guidelines would be a positive step for this field of braille transcription.

Braille Literacy Canada (BLC) has undertaken this task and has established a committee to develop transactional document guidelines. The final draft has been sent to our Braille Formats Committee for review and once approved will be forwarded to our Board of Directors for another review process. We are hoping that this document will be approved by our membership at the BLC Annual General Meeting in May of this year.

The following topics are addressed in the guidelines:

* Placement of Terms and Conditions;
* Truncated text;
* Cheque images, pie charts and any other visual information that is difficult to convert into braille;
* Remittance vouchers;
* Printed information that may be included for identification purposes;
* Foreign-language words in an English context; and
* Binding versus stapling of embossed statements.

This is by no means an exhaustive list of the issues covered in these guidelines, but it gives an idea of the decisions that producers are required to make when implementing automated transcription.

Transactional Material And Unified English Braille (UEB)

I could not present a paper to the General Assembly of the International Council on English Braille without discussing the impact of UEB on transactional material. An initial investment is required – the automated conversion tool must be updated to account for the changes being implemented in UEB. Once the tool has been updated, the one-to-one correlation of print to braille symbols should lead to improvements in braille output.

Conclusion

Technology is indeed changing the way we access braille, but it is also changing the way we produce it. Transactional material is made available in braille by means of an automated process which does not allow for manual intervention by a certified transcriber. As braille users we should continue to have high standards regarding the quality of the braille we receive, but we also need to be aware of the unique challenges of transcribing high volume, personal and confidential information within tight deadlines and without any manual intervention.

References

Links to Legislation Related to document Accessibility:

Accessibility for Ontarians with disabilities Act (AODA)

<https://www.ontario.ca/laws/statute/05a11>

Americans with Disabilities Act (ADA)

[www.ada.gov](http://www.ada.gov)

UK Equality Act

<http://www.legislation.gov.uk/ukpga/2010/15/contents>

Disability Discrimination Act (DDA)

<https://www.comlaw.gov.au/Series/C2004A04426>

Security Regulations:

* PCI DSS (Payment Card Industry Data Security Standards)
* PIPEDA (Personal Information Protection and Electronic Documents Act
* HIPA (Health Information Protection Act) Canada
* HIPAA (Health Insurance Portability and Accountability Act) United States