Docket: 2014-1702(IT)I

BETWEEN:

2037625 ONTARIO INC. (FORMERLY ITC INVOICE TO CASH INC.),

Appellant,

and

HER MAJESTY THE QUEEN,

Respondent.

Appeal heard on November 26, 2014, April 21 and 22, 2015 at Toronto, Ontario

Before: The Honourable Justice Diane Campbell

Appearances:

Agent for the Appellant:	Todd S. Louie / Ryan Wagman
Counsel for the Respondent:	Aaron Tallon / Christopher Bartlett

---

JUDGMENT

The appeal from the assessment made under the *Income Tax Act* for the taxation year ending August 31, 2008 is dismissed in accordance with the attached Reasons for Judgment.

As this appeal proceeded under the Informal Procedure, there will be no order as to costs.

Signed at Ottawa, Canada, this 30th day of October 2015.

"Diane Campbell"

Campbell J.

Citation: 2015 TCC 269
Date: 20151030
Docket: 2014-1702(IT)I

BETWEEN:

2037625 ONTARIO INC. (FORMERLY ITC INVOICE TO CASH INC.),

Appellant,

and

HER MAJESTY THE QUEEN,

Respondent.

REASONS FOR JUDGMENT

Campbell J.

Introduction

[1] The Appellant is appealing from a Notice of Reassessment for the 2008 taxation year in which the Minister of National Revenue (the "Minister") reduced the Appellant's claim for investment tax credits ("ITCs") in the amount of $32,425 to nil. The ITCs arose as a result of the Appellant's claim for allowable scientific research and experimental development ("SR&ED") expenditures of $69,354.

[2] The amount in dispute exceeds the limit of $25,000 for appeals proceeding under the Informal Procedure. However, the Appellant has elected to proceed pursuant to the Informal Procedure and to limit the appeal amount to $25,000 in accordance with section 17 of the *Tax Court of Canada Rules (Informal Procedure)*.

The Facts

[3] The Appellant is a Canadian-controlled private corporation which was incorporated in December, 2003. Its head office is located in Mississauga, Ontario. It offers financial "factoring" services to its business clients. "Factoring" is a term used to describe a process in which a business can sell its accountants receivable to

a third party. The business benefits because it receives immediate cash for its operating activities. The third party, such as the Appellant, purchases those invoices for a discount and assumes the obligation of collecting the money owed on the invoices. The Appellant advances 90 percent of the invoice amount to the business, with the balance of 10 percent being withheld as a fee deposit. The Appellant charges 0.1 percent of the invoice amount per day to the business, from the date of the invoice payment, until the invoice is paid by the customer. The Appellant would forward any remaining balance from the fee deposit to the client as a rebate (Exhibit A-2, *T661 Part 2: Technical Submission to CRA*, page 2).

[4] Due to the labour-intensive nature of factoring services and the requirement to track a large number of accounts in respect to both clients and debtors, the Appellant developed its own *Factorsuite* software package, which provided factoring companies and their business clients with an integrated account management solution. This project was referred to as the *Factorsuite* Optimization Project (the "Project").

> … The *Factorsuite* application was developed using *iFactum* which runs on an IBM WebSphere Java application server. … The application's language was purposefully selected and developed in order to allow the *Factorsuite* application to run on any combination of hardware platform or operating system. …
>
> (Exhibit A-2, page 3)

The Evidence

[5] Danilo Caicedo, one of the Appellant's shareholders, and Victor Sarmiento provided evidence for the Appellant in respect to the SR&ED activities conducted in the relevant period. According to Mr. Caicedo, the purpose of developing the web-based *Factorsuite* application was two-fold: (1) to provide more efficient and cheaper services related to credit facilities and the factoring of receivables in order to better serve its clients; and (2) to distinguish the Appellant from its competitors (Transcript, November 26, 2014, page 19). This application was meant to minimize human intervention so that the operation would be more cost-efficient and more precise.

[6] In 2008, the Appellant was already utilizing existing third-party software, *Factorsoft*, and its predecessor, *FactorPC*. This software provided basic engine functions that maintained accounts in a master database working with the Appellant's own *Factorsuite* technology. However, the software lacked many functions that the Appellant required in order to enhance the technology to produce

its intended results. According to the Appellant's evidence, introduced through its two witnesses, *Factorsuite* required that the Appellant integrate different software, including *Factorsoft* and *FactorPC*, "… in order to integrate with various platforms" (Transcript, November 26, 2014, page 21). The goal was to fully integrate the specific calculations, contained in *Factorsoft* and *FactorPC* data, into the Appellant's *Factorsuite* application while maintaining the integrity of those calculations after integration occurred.

[7] The Appellant was also required to address potential problems with another product, the faxing software owned by its client, ActFax. The ActFax software was designed to send a single fax containing the same information to many individuals at the same time. The Appellant wanted to send different and unique faxes to different recipients while maintaining the integrity of the information and the order in which they were received. This required that the ActFax software also be integrated with the Appellant's *Factorsuite* technologies in order "… to provide unique faxes for each of the recipients." (Transcript, November 26, 2014, page 31). Although the Appellant contacted the European fax manufacturer to assist with the proposed integration, the Appellant was informed that ActFax was not designed for, nor could it be adapted to, achieving the Appellant's goals.

[8] The nature of the Appellant's business activities required that it deliver "real-time information" to clients so that they could rely on it in structuring their current affairs. To deliver this information, the Appellant used the "caching" technique which Mr. Caicedo described as:

> A. A cache is a temporary memory, a local memory, that a computer has, where it keeps a certain amount of information available to [be] used in the way the user wants to.
>
> (Transcript, November 26, 2014, page 53)

[9] Mr. Caicedo testified that the Appellant wanted to provide real-time information to customers expediently by reducing the time required for caching.

[10] Mr. Caicedo also testified that the third-party software provider, Bayside, which owned the *Factorsoft* and *FactorPC* programs, did not want to share information regarding the abilities and processes involved in its proprietary software and its storage. Because of Bayside's unwillingness to share the internal code of their program, if the Appellant was to succeed in its integration process, it was required to develop data mining solutions that would enable it "… to

appropriately map the existing *Factorsoft* engine and interface it with their own." (Exhibit A-2, page 4). Mr. Caicedo explained that, in data mining, the Appellant was essentially accessing data to manipulate the information to produce reports and develop and integrate their own processes with others (Transcript, November 26, 2014, page 26). If relevant data is located on different software and can be properly integrated, the Appellant's goal was to utilize it on a common basis so that its own *Factorsuite* application could run with various platforms. In respect to data mapping, Mr. Caicedo stated:

> A. In order to be able to have two technologies interacting, we needed to have a road map. Was there equivalent data from point A to point B? We can have the road map established for the two black boxes.
>
> (Transcript, November 26, 2014, page 26)

[11] According to Mr. Caicedo's testimony, one of the underlying technological challenges was to achieve integration of all these technologies where it was difficult for the Appellant to actually change the technology. He explained that certain elements, however, could be introduced to the existing technology to achieve the desired result. Since the technology did not exist in the public domain, hypotheses were formulated and testing completed by employees, as well as an external company hired to do coding. As an example of the experimentation undertaken by the Appellant, he stated that, in attempting to reduce caching time, five or six different approaches were pursued and within each of these, testing was completed.

[12] The Appellant's second witness, Victor Sarmiento, who was qualified as an expert in software development, elaborated on Mr. Caicedo's testimony. Mr. Sarmiento's company, Highweb & Page Group Inc., completed work on the Appellant's Project. According to his evidence, techniques, performed by the Appellant, in respect to establishing a relationship between two known databases, consisted of more than data mining and data mapping and instead, according to his testimony, the Appellant was actually engaged in process mining:

> A. […] The problem here and the challenge here was that we didn't know database A at all. It was a proprietary software from a company, and they did not disclose at all any of the details not only of the database, but also the business logic implemented in the software that processes that database. In that sense, it is not data mapping; it is not data mining.
>
> (Transcript, November 26, 2014, page 89)

> A. What we did at the time was try to obtain knowledge from this system, simulating transactions through these unknown systems, and analyzing the results in order to get some conclusions of what this system was doing and how it was structured. Based on that, we were basically generating multiple transactions and analyzing not only the results, but all the history of these transactions that are stored. From that perspective, at the time – we are talking about 2007 – there was no name for this. It wasn't until recently, in 2009, when the Institute of Electrical and Electronics Engineers created a task force for the development of this type of technique, and it was called process mining, which is a different aspect. The Institute of Electrical and Electronics Engineers published a manifesto in order to promote the development, the evolution and adoption of process mining. This document was published in 2011. We are referring to a discipline that we were performing to some extent back in 2007, when the Institute of Electrical and Electronics Engineers were working in establishing a task force two years later, in 2009, and to then publish this manifesto in 2011.
>
> (Transcript, November 26, 2014, page 90)

[13] In Mr. Sarmiento's view, the Appellant was not mapping or mining data, in respect to this particular project but, instead, was trying to discover the process flow in the otherwise unknown software system. According to his evidence, data mining is standard practice when the original databases and data sources are known so that information can be extracted in order to be converted. If the source is unknown, the technological challenge will be to retrieve information from that system, which he testified, goes beyond data conversion. Specifically, the Appellant could not "… map and mine data from *Factorsoft*, without knowing the structure of the database …" (Transcript, November 26, 2014, page 89). The Appellant had no access to the proprietary software belonging to Bayside or of the business logic implemented in that software that processed the data. In this respect, the Appellant's activities went beyond data mapping and data mining. Process mining involved the discovery of a process field inside an existing information system where there is no possibility otherwise of extracting the information. In doing so, the Appellant was attempting to, not only understand the structure of the database itself, but also pursue its goal of interacting with the entire system (Transcript, November 26, 2014, page 117).

[14] On cross-examination, Mr. Sarmiento agreed that the Appellant was looking at log files, generated by the *Factorsoft* program, in order to determine what the processes were doing. He made an analogy between log files and microscopes in that both were scientific tools where someone does more than put his "… eye to a microscope" in order to address uncertainties (Transcript, November 26, 2014, page 106). When asked by Respondent counsel whether analyzing a log file was

simply part of the computer programming discipline and a part of a programmer's due diligence, Mr. Sarmiento stated that it would depend on the origin of the log file and if it was a *Factorsoft* log file,

> A. No, they are not intended to tell me. They are intended to tell *Factorsoft's* support team what is going on. For me, it is a challenge.

(Transcript, November 26, 2014, page 124)

[15] In respect to the problems encountered with ActFax, Mr. Sarmiento explained that he designed algorithms and created a system that would solve the technological uncertainty respecting the faxing issues by finding "… a balance between performance, reliability, accuracy in generating these fax transmissions." (Transcript, November 26, 2014, page 125). The challenge in this area, according to Mr. Sarmiento, was to maintain data accuracy and real-time availability in an environment of high-level performance. The design of algorithms and their implementation were the first steps in creating the program.

[16] The Respondent's witness, Leon Pellissero, explained the steps he undertook in the review process and how he arrived at the conclusion that the Appellant was not eligible for a SR&ED claim. His evidence was not successfully challenged on cross-examination.

[17] The Minister concluded that the Appellant did not conduct any SR&ED activities related to its *Factorsuite* project, as those activities did not involve a scientific and/or technological advancement. The issue is whether the Minister properly assessed the Appellant, that is, did the Appellant incur any allowable SR&ED expenditures in the 2008 taxation year and is the Appellant entitled to any ITCs in respect to those activities?

Jurisprudence and Analysis

[18] SR&ED is defined in subsection 248(1) of the *Income Tax Act* (the "*Act*") as follows:

> "*scientific research and experimental development*" - "scientific research and experimental development" means systematic investigation or search that is carried out in a field of science or technology by means of experiment or analysis and that is

> (*a*) basic research, namely, work undertaken for the advancement of scientific knowledge without a specific practical application in view,
>
> (*b*) applied research, namely, work undertaken for the advancement of scientific knowledge with a specific practical application in view, or
>
> (*c*) experimental development, namely, work undertaken for the purpose of achieving technological advancement for the purpose of creating new, or improving existing, materials, devices, products or processes, including incremental improvements thereto,
>
> and, in applying this definition in respect of a taxpayer, includes
>
> (*d*) work undertaken by or on behalf of the taxpayer with respect to engineering, design, operations research, mathematical analysis, computer programming, data collection, testing or psychological research, where the work is commensurate with the needs, and directly in support, of work described in paragraph (*a*), (*b*), or (*c*) that is undertaken in Canada by or on behalf of the taxpayer,
>
> but does not include work with respect to
>
> (*e*) market research or sales promotion,
>
> (*f*) quality control or routine testing of materials, devices, products or processes,
>
> (*g*) research in the social sciences or the humanities,
>
> (*h*) prospecting, exploring or drilling for, or producing, minerals, petroleum or natural gas,
>
> (*i*) the commercial production of a new or improved material, device or product or the commercial use of a new or improved process,
>
> (*j*) style changes, or
>
> (*k*) routine data collection;

[19] The foundational case remains Justice Bowman's decision in *Northwest Hydraulic Consultants Ltd. v The Queen*, 98 DTC 1839, which was confirmed by the Federal Court of Appeal in *R I S-Christie Ltd. v Canada*, 99 DTC 5087, and *C.W. Agencies Inc. v Canada*, 2001 FCA 393, 2002 DTC 6740. Justice Bowman, at paragraph 16, sets out a number of criteria that a taxpayer must prove if a project's activities are to be considered SR&ED:

[…]

1. Is there a technical risk or uncertainty?

[…]

2. Did the person claiming to be doing SRED formulate hypotheses specifically aimed at reducing or eliminating that technological uncertainty? …

[…]

3. Did the procedures adopted accord with established and objective principles of scientific method, characterized by trained and systematic observation, measurement and experiment, and the formulation, testing and modification of hypotheses?

[…]

4. Did the process result in a technological advance, that is to say an advancement in the general understanding?

[…]

5. Although the *Income Tax Act* and the Regulations do not say so explicitly, it seems self-evident that a detailed record of the hypotheses, tests and results be kept, and that it be kept as the work progresses.

[…]

[20] Justice Bowman, again at paragraph 16 of his reasons in *Northwest Hydraulic*, explained the terms "technological risk or uncertainty" as follows:

[…]

1. Is there a technical risk or uncertainty?

(a) Implicit in the term "technical risk or uncertainty" in this context is the requirement that it be a type of uncertainty that cannot be removed by routine engineering or standard procedures. I am not talking about the fact that whenever a problem is identified there may be some doubt concerning the way in which it will be solved. If the resolution of the problem is reasonably predictable using standard procedure or routine engineering there is no technological uncertainty as used in this context.

> (b) What is "routine engineering"? It is this question, (as well as that relating to technological advancement) that appears to have divided the experts more than any other. Briefly it describes techniques, procedures and data that are generally accessible to competent professionals in the field.
>
> […]

[21] The onus is on the Appellant in this appeal to show that, on a balance of probabilities, those expenditures it incurred were for SR&ED activities in respect to the 2008 taxation year. For the following reasons, I am not satisfied that the Appellant has met that onus because, based on the evidence adduced, the Appellant has not demonstrated that its activities were anything more than routine engineering or standard procedures.

[22] Although I accepted Mr. Sarmiento as an expert witness and did not accept the Respondent's witness, Mr. Pellissero, as an expert, I prefer the evidence of Mr. Pellissero, as it was presented with greater clarity and, in the end, was more convincing.

[23] There were three technological objectives of the Appellant's *Factorsuite* Project. First, the Appellant sought to interface *Factorsuite* with the third party software, *FactorPC* and *Factorsoft*, which was owned by Bayside, in order to ensure the functionality and integrity of calculations between these software applications. Second, the Appellant sought to maintain this functionality and integrity with regard to its auto-faxing feature, so that personalized client reports could be transmitted efficiently and in real time. Third, the Appellant sought to achieve "interoperability and scalability" between existing but disparate factor software applications and the Appellant's own *Factorsuite* technology so that data, which included balances, statements of account and historical transaction data, could be presented to clients instantaneously, precisely and with security (Exhibit A-2, pages 3 to 4).

[24] The Appellant's argument, according to Mr. Caicedo, is that it has engaged in systematic experimentation through data mining and data mapping techniques, and according to Mr. Sarmiento's testimony, more appropriately through process mining, in order to optimize the migration of data, while ensuring flawless interoperability and scalability for differing factor software packages. It also sought to optimize synchronization of the facsimile aspect to ensure optimal performance in real time between differing factor software. Its position is that it engaged in hypothetical transactions in a scientifically designed test environment.

[25] Mr. Pellissero set out three technological uncertainties related to the Appellant's activities:

> The first one was how do we get information from – I should just mention, the *FactorPC* which is the predecessor, they wanted to move the information to *Factorsoft*.
>
> So the first technological uncertainty was in order for *Factorsuite*, their internal product, to work with things and produce results, it has to get information from [*Factorsoft*].
>
> So that was the first technological uncertainty.
>
> How do we move the data from *Factorsoft* to *Factorsuite*?
>
> Their second claimed technological uncertainty was how do we move the information from *Factorsuite*, their own product, to ActFax, the third party product to fax out, because they were having problems with that.
>
> And the third technological uncertainty was to speed up the queries and/or queries that generate reports because they were experiencing slowness in this generating reports.
>
> And that, again, typically would be coming from their *Factorsuite* products.

(Transcript, April 21, 2015, pages 67 to 68)

[26] These uncertainties reflect those listed by the Appellant at Exhibit A-2:

> 1. Although extensive efforts were made to research the matter, the design team was unable to determine how to accurately map and mine data from within *Factorsoft* without knowing the structure of the database. …
>
> 2. It was unclear to ITC how to ensure seamless and secure interoperability between proprietary *Factorsuite* and pre-existing ActFax development. …
>
> 3. ITC was unsure of how to streamline data presentation in dynamic views to offer real-time performance without compromising security or precision. It became evident that the only method of gaining this information was through experimentation. …

(Exhibit A-2, pages 5 and 6)

[27] Mr. Pellissero's description of the techniques used, including data mining, data mapping, process mining and caching, are very similar to those descriptions provided by the Appellant's two witnesses. Mr. Pellissero concluded that there were no technological uncertainties existing with the technology and that the processes employed were routine procedures that any competent computer programmer using industry standard methods would utilize.

[28] With the exception of the Appellant's own *Factorsuite*, according to Mr. Pellissero, although the structures of the products were unknown, the main challenge was to obtain information from one product and then move it to another. However, he testified that this challenge could be resolved by the use of well-known techniques.

[29] The Appellant's agent, Mr. Louie, submitted that the uncertainties related to a lack of information respecting those third-party products rather than to the task of simply moving the information from one program to another. In cross-examining Mr. Pellissero, he phrased his question as follows:

> Q. […] Is it possible that you have overlooked the fact that during testimony witness Victor Sarmiento stated clearly that the challenge was not to move data, but to achieve interoperability and scalability between these two disparate platforms?
>
> (Transcript, April 21, 2015, page 122)
>
> Q. […] So in your determination of eligibility, is it conceivable that you have overlooked the fact that the information was unavailable even from the supplier of the software?
>
> (Transcript, April 21, 2015, page 125)

[30] I will review each individual uncertainty separately. In respect to the first claimed uncertainty, the attempt to understand the structure of data belonging to a third party software vendor in order to have it work in conjunction with its own *Factorsuite* application, Mr. Caicedo testified that the processes of data mining and data mapping were used to determine the data in the database and its structure. Mr. Sarmiento described the technique that was utilized as process mining, which included the examination of event logs in order to determine how a program was functioning. Although Mr. Sarmiento referred to an article, first published in 2011 on process mining, the Appellant did not produce the article. The Appellant's agent, in his submissions, also indicated that the technique of process mining may

have been available as early as 2008. According to Mr. Pellissero, the technique existed in 2007 and information on it was available. There can be no technological uncertainty if the resolution of a problem is reasonably predictable using already available standard procedures or routine engineering (*Northwest Hydraulic*, at paragraph 16). The Appellant failed to produce sufficient evidence to support its contention that uncertainty existed in the *Factorsoft* and *Factorsuite* interoperability and failed to adduce evidence to specifically identify the work that would have been conducted to accomplish such a process. The third party programs were running without apparent problems and as Mr. Pellissero explained: "… it … tells us that the programming language is coded syntactically correct, the underlying syntax in the program is good, the database was generated according to what the database is doing, according to its limits and constraints." (Transcript, April 21, 2015, page 77). In fact, it is unclear from the evidence what the precise state of the available knowledge was at this time. Based on the facts, I would conclude that the techniques used, to determine what information or data was contained in the unknown programs and how it could eventually interact with the Appellant's own *Factorsuite* program, were the available standard procedures routinely used by a competent programmer.

[31] With respect to the second uncertainty alleged by the Appellant, the fax sending component of the program, it would appear from the evidence that programs, designed to generate client reports that were sent efficiently and in correct order, are routine and standard procedural work that competent computer programmers perform. The Appellant's solution involved the examination of the data that the faxes would contain and then a procedure was written and a holding area created where the faxes could be sent in the correct order. The evidence does not support that this procedure involved a technological uncertainty.

[32] With respect to the third uncertainty, the requirement to find a system that would produce client reports in real time, the Appellant failed to convince me that the procedures to process reports, cache them and refresh them so that those reports that were used more frequently could be accessed more readily, were anything more than routine procedure for a competent programmer.

[33] Mr. Caicedo also testified that there were problems because the data in the *Factorsoft* application was in SQL while the data in its older version, *FactorPC*, was in dBase IV and had to be converted to SQL in order to successfully map the data. Again, this is common procedure in computer programming and such conversion is frequently ineligible for SR&ED, as noted in Information Circular IC97-1. While I am not bound by Canada Revenue Agency policy established in

such circulars, it has been accepted and followed as a guideline for eligibility in other jurisprudence. For example, *Zeuter Development Corporation v The Queen*, 2006 TCC 597, 2007 DTC 41, referenced this circular in considering whether a new product, created by the taxpayer corporation for its own business, used known techniques that were ineligible for SR&ED. In *Zeuter*, the project related to an on-line learning tool to be used by high school students. At paragraph 23, Justice Little stated the following:

> [23] In summary, the work done by the Appellant may be an advancement for the company but not an advancement in the underlying technology. Mr. Slater argued that the technological advancement is essentially the presentation of information in a form that can be used by students or other users. However, he has failed to demonstrate this from the viewpoint of the SR & ED definition in the Act. The utility of the final product is determinative of the technological advancement. Rather, the issue is in developing that tool, what sort of technological challenges had to be overcome, and the Appellant has not provided any information to demonstrate that it encountered some technological challenge that could not be overcome by standard engineering.

[34] In *Jentel Manufacturing Ltd v The Queen*, 2011 FCA 355, 2012 DTC 5031, the taxpayer developed a small parts storage system, called Multi-Bins, to be utilized in industrial and shop floor settings. The work completed in the development of this product was "in line with standard product development" and was not a true technological advance.

[35] In *Hypercube Inc. v The Queen*, 2015 TCC 65, 2015 DTC 1089, Justice Lamarre concluded that the taxpayer's "crawler" technique was a standard practice. Even though it had been developed to accomplish novel items, the programming tools were already available in the field. These cases, and in particular *Hypercube*, are similar to the present appeal in that well-known techniques were used to develop software in order to identify the weaknesses in different websites. It also addresses Mr. Sarmiento's testimony respecting his comparison regarding the use of log files in computer programming and microscopes to research cancer. The SR&ED regime requires more than just looking into a microscope for research. For instance, it would require, in Mr. Sarmiento's example of looking at cancer cells, the addition of a new substance into cancer cells under a microscope or the removal of a specific component or the amalgam of two different techniques to create something new. Such methods fall within the ambit of technological advancement. However, where a new product is created through well-known techniques, it will not qualify as SR&ED activities

because it does not involve any scientific or technological risk or uncertainty. Mr. Louie appears to acknowledge this principle in his submissions:

> In effect, if a scientist is observing the behaviour of an organism, he's altering a chromosome or adding proteins.
>
> And through his observation one could argue that he was performing standard practice, to use a microscope, a test tube, a Bunsen burner, whatever implements he happens to use.
>
> But what if, through the observation of that organism, a scientist cures cancer.
>
> Is it still standard practice?

(Transcript, April 22, 2015, page 174)

So while a project may lead to a major advancement in a field, there may be no scientific or technological uncertainty, as contemplated by Justice Bowman in *Northwest Hydraulic*, where the element of uncertainty is absent because standard practice was utilized, as in the example of a scientist utilizing a microscope to cure cancer by doing nothing more than observing the interaction among those cancer cells under a microscope. In that instance, it would not qualify as SR&ED within the meaning of paragraph 248(1)(*c*) where the scientist withdrew the element of uncertainty by using only the standard and well-known practice of microscopic observation.

[36] In the present case, the Appellant has adduced evidence of a product improvement that benefitted the company but there was insufficient evidence for me to conclude that a scientific or technological advancement occurred. Product improvement alone is insufficient to bring a taxpayer within the SR&ED provisions contained in the *Act*. The evidence supports my conclusion that the Appellant employed available programming tools to resolve its objectives and those tools were known in the field and capable of being utilized by competent computer programmers. The fact that the Appellant integrated all of the programs was clearly an advancement for the company, but it does not qualify as an advancement in the underlying technology, where the technology underlying each of the programs, *FactorPC*, *Factorsoft*, *Factorsuite* and ActFax, did not raise any problems at the time. Despite the in-depth explanation provided by Mr. Louie, the Appellant's agent, in regard to the uncertainty in that the third-party programs were unknown, the evidence failed to demonstrate what new technology was introduced to resolve it or, as Mr. Louie phrased it, what chromosome was altered or what

protein was added. The evidence supports that well-known, routine programming tools were used to develop and improve upon the procedure of reporting to clients efficiently and quickly in a real-time environment.

[37] In the present appeal, the technological advancement cannot be either the interoperability or the scalability of unknown programs, as a vast number of programs interact everywhere with each other on a daily basis. The fact that the third party products belonging to Bayside and ActFax were unknown was an additional challenge encountered by the Appellant, but it cannot by itself constitute a technological uncertainty.

[38] In *1726437 Ontario Inc. o/a Airmax Technologies v The Queen*, 2012 TCC 376, 2013 DTC 1008, Justice Hogan concluded that a combination of different techniques may constitute a technological advancement. However, while I agree that an amalgam of different techniques may constitute a technological advancement, this will only be so where a new technique is created that has never been previously used in that particular industry. Otherwise, the individual utilization of techniques, such as use of mining, mapping, process mining or caching, could never give rise to an advancement. However, this is not the case in the present appeal and I remain unconvinced by the evidence, or I should say lack of it, that process mining was a new technique at the time that the Appellant employed it and that any of the other techniques employed were anything more than the standard procedures available at the time.

[39] The Appellant's agent, Mr. Louie, attempted to distinguish "process mining" from "technique". He referenced Mr. Sarmiento's evidence in this respect, in which he stated that process mining was a discipline involving a methodology used for research as opposed to a technique, which is presumed to be a known. Whether process mining is, in fact, a methodology or a technique, the integration of the programs or the exchange of information between one program and another necessarily includes some knowledge that was already a known quantity and, therefore, there were no SR&ED activities because there was a product advancement only, which is insufficient to qualify as SR&ED activities.

[40] In addition, the Appellant has not met the requirement of showing that hypotheses, aimed at reducing or eliminating the alleged technological uncertainties, were specifically formulated and tested and that scientific investigation was conducted and procedures adopted in accordance with the scientific method. According to the Federal Court of Appeal in *C.W. Agencies Inc. v Canada*, 2001 FCA 393, 2002 DTC 6740, at paragraph 17, this requires that "…

a detailed record of the hypotheses tested, and results [achieved was] kept as the work progressed". There is no evidence that the Appellant adopted this approach nor was there any reasonable explanation offered for its failure to do so and, on this basis also, the appeal cannot succeed. Both Mr. Caicedo and Mr. Sarmiento testified that the Appellant undertook multiple hypotheses to make the differing programs interoperable. For example, in respect to the second uncertainty concerning the faxing problems, Mr. Caicedo explained that the hypothesis was whether the Appellant could create a plain text file containing all of the information that could be manipulated in the manner the Appellant required. However, none of the Appellant's hypotheses, that were specifically aimed at reducing or eliminating the alleged uncertainties, were reflective of the scientific research method and very little supporting documentation to substantiate the testing was introduced into evidence. I was provided no evidence of specifics respecting the number of tests performed or the nature of the experiments, the modifications or the results. In fact, some of the documentation that was provided included handwritten notes, which were not in English, and no translation was included.

[41] In conclusion, the work performed by the Appellant on the *Factorsuite* Project was not SR&ED, as defined in subsection 248(1) of the *Act*, and the Minister correctly disallowed the Appellant's SR&ED claim. Consequently, the expenditures claimed by the Appellant in engaging in this Project are not qualified expenditures pursuant to subsection 127(9) and ITCs were properly disallowed in respect to the 2008 taxation year.

[42] For these reasons, the appeal is dismissed.

[43] As this appeal proceeded under the Informal Procedure, there will no order as to costs.

Signed at Ottawa, Canada, this 30th day of October 2015.

"Diane Campbell"

Campbell J.

CITATION:	2015 TCC 269
COURT FILE NO.:	2014-1702(IT)I
STYLE OF CAUSE:	2037625 ONTARIO INC. (FORMERLY ITC INVOICE TO CASH INC.) and HER MAJESTY THE QUEEN
PLACE OF HEARING:	Toronto, Ontario
DATES OF HEARING:	November 26, 2014, April 21 and 22, 2015
REASONS FOR JUDGMENT BY:	The Honourable Justice Diane Campbell
DATE OF JUDGMENT:	October 30, 2015

APPEARANCES:

Agent for the Appellant:	Todd S. Louie / Ryan Wagman
Counsel for the Respondent:	Aaron Tallon / Christopher Bartlett

COUNSEL OF RECORD:

For the Appellant:

Name:	
Firm:	

For the Respondent:	William F. Pentney Deputy Attorney General of Canada Ottawa, Canada