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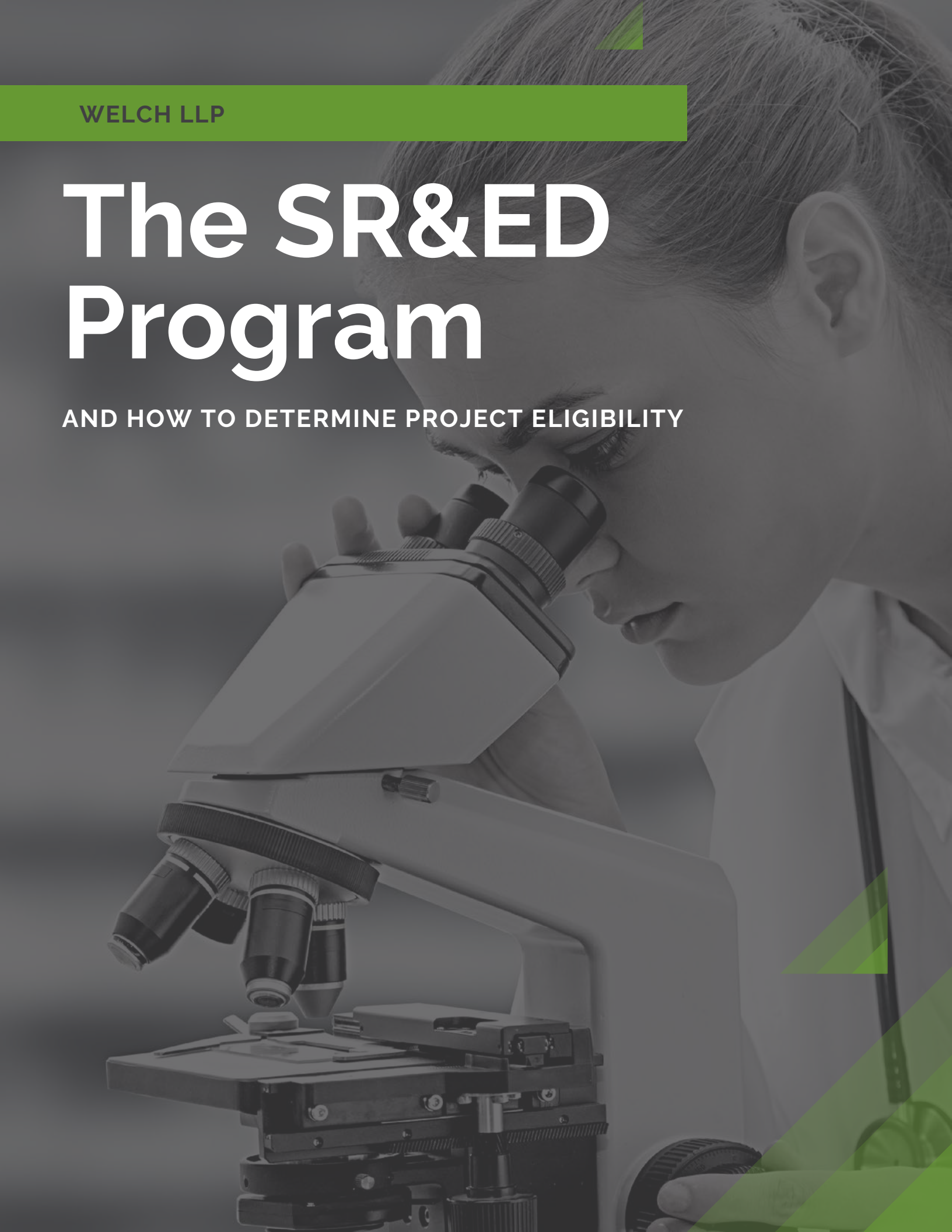
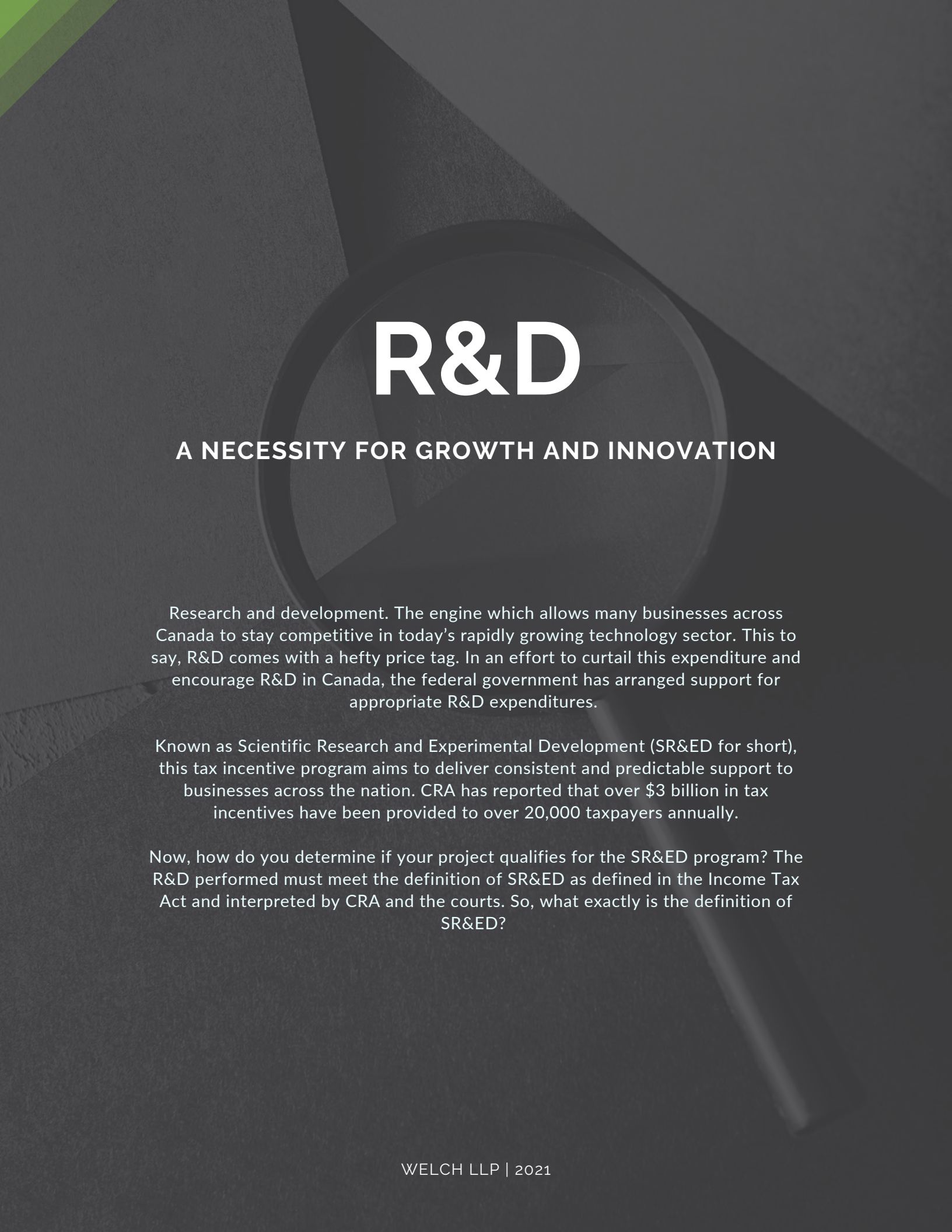
The SR&ED Program

AND HOW TO DETERMINE PROJECT ELIGIBILITY





R&D

A NECESSITY FOR GROWTH AND INNOVATION

Research and development. The engine which allows many businesses across Canada to stay competitive in today's rapidly growing technology sector. This to say, R&D comes with a hefty price tag. In an effort to curtail this expenditure and encourage R&D in Canada, the federal government has arranged support for appropriate R&D expenditures.

Known as Scientific Research and Experimental Development (SR&ED for short), this tax incentive program aims to deliver consistent and predictable support to businesses across the nation. CRA has reported that over $3 billion in tax incentives have been provided to over 20,000 taxpayers annually.

Now, how do you determine if your project qualifies for the SR&ED program? The R&D performed must meet the definition of SR&ED as defined in the Income Tax Act and interpreted by CRA and the courts. So, what exactly is the definition of SR&ED?

SR&ED

a systematic investigation conducted through experimentation or analysis with the purpose of achieving an advancement in scientific knowledge or technology.

BREAKING DOWN SR&ED

The Income Tax Act defines Scientific Research and Experimental Development (SR&ED) in subsection 248(1) as a systematic investigation conducted through experimentation or analysis with the purpose of achieving an advancement in scientific knowledge or technology.

This definition is filled with terms and phrases which connect to some fundamental aspects of SR&ED. This statement essentially tells us how and why SR&ED is carried out. So, let's try to break down this definition into smaller chunks;

ADVANCEMENT IN SCIENTIFIC KNOWLEDGE OR TECHNOLOGY

With this interpretation of an advancement, the Government wants to make clear that SR&ED is undertaken to achieve the creation of knowledge which advances the understanding of science or technology beyond that of the existing knowledge base. A scientific or technological advancement, by definition, implies an attempt to resolve a scientific or technological uncertainty.

TECHNOLOGICAL UNCERTAINTY

An uncertainty can be either scientific or technological and relates to a result or objective, and whether that result or objective can be achieved based on available knowledge. Uncertainties can extend to what is known as a system uncertainty. This uncertainty refers to the unpredictable interactions between individual components of a system which can arise during the integration of technologies.
With all this in mind, we can recognize that an uncertainty arises when you encounter a problem and realize that problem cannot be resolved based on known solutions, whether the problem can be resolved at all - and, furthermore, you are not even sure of the methods needed to resolve the problem.

SYSTEMATIC INVESTIGATION OR SEARCH… BY MEANS OF EXPERIMENT OR ANALYSIS

CRA interprets a systematic investigation as the methods used to perform SR&ED – consisting of four components:

1. A problem is defined;
2. A hypothesis is advanced to address the problem;
3. The hypothesis is tested by experiment or analysis;
4. Conclusions are developed based on the results.

Terms like hypothesis and experiment or analysis may have little to no meaning in an industrial context. So, it might be easier to think of a hypothesis as a possible solution to the problem. And the experiment or analysis as the testing (under controlled conditions) which is performed to achieve this solution.

As you can see, the definition of SR&ED is filled with intricacies which require careful consideration to submit a successful SR&ED claim.

CRA's Interpretation of SR&ED

In an attempt to simplify the navigation of the complexities within the definition of SR&ED, CRA has adopted a five question model as set out in Northwest Hydraulics Consultants Ltd. V. R. (98 DTC 1839). For work to qualify as SR&ED, answers to each of these questions must be 'yes' to verify there is in fact SR&ED.

#1

Was there a scientific or technological uncertainty?

#2

Did the effort involve formulating hypotheses specifically aimed at reducing or eliminating that uncertainty?

#3

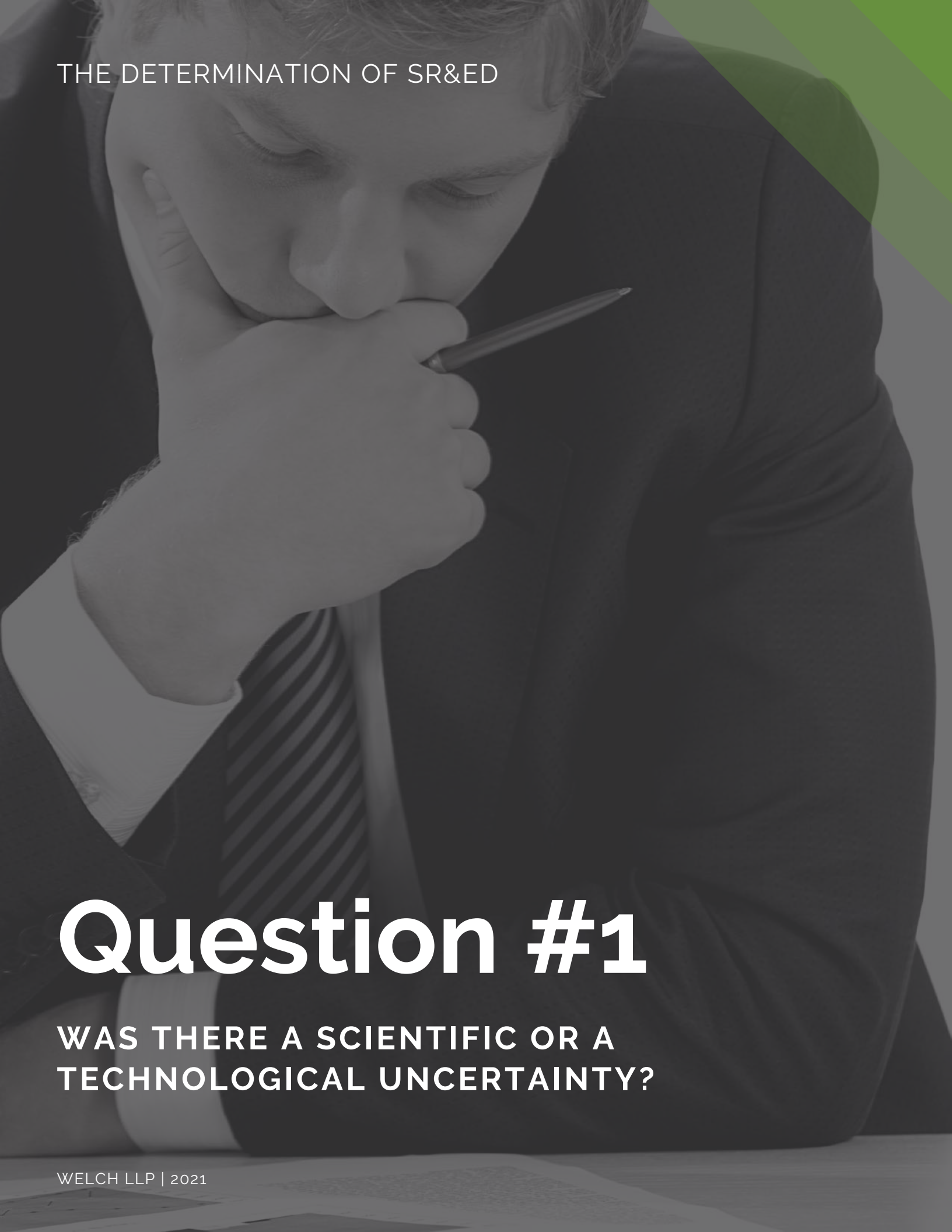
Was the overall approach adopted consistent with a systematic investigation or search, including formulating, and testing the hypotheses by means of experiment or analysis?

#4

Was the overall approach undertaken for the purpose of achieving a scientific or a technological advancement?

#5

Was record of the hypotheses tested and the result kept as the work progressed?



THE DETERMINATION OF SR&ED

Question #1

WAS THERE A SCIENTIFIC OR A TECHNOLOGICAL UNCERTAINTY?

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Question #1

Was there a scientific or a technological uncertainty?

Referring back to the definition, an uncertainty:

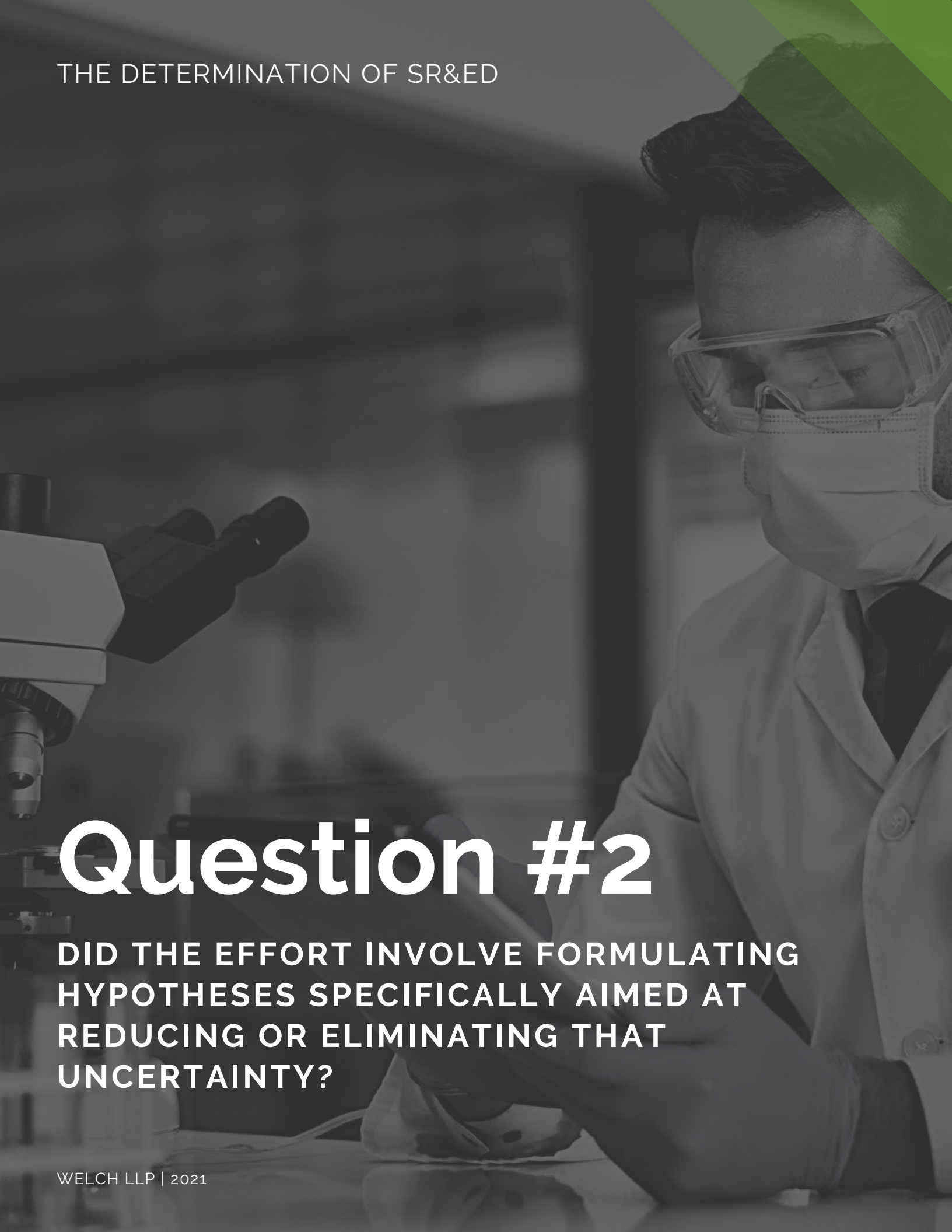
1. Cannot be resolved based on the existing knowledge base;
2. Recognizes the need for an advancement.

When defining an uncertainty, it is important to identify what is lacking in the existing knowledge base and why the uncertainty cannot be resolved by known solutions.

If a problem can be resolved based on existing knowledge and known tools and techniques, it is known as a **technical problem** and does not qualify for SR&ED.

This is why it is important to identify the existing knowledge base and why your uncertainty cannot be resolved solely by it.

Technical Problem:
If a problem can be resolved based on existing knowledge and known tools and techniques, it does not qualify for SR&ED.



Question #2

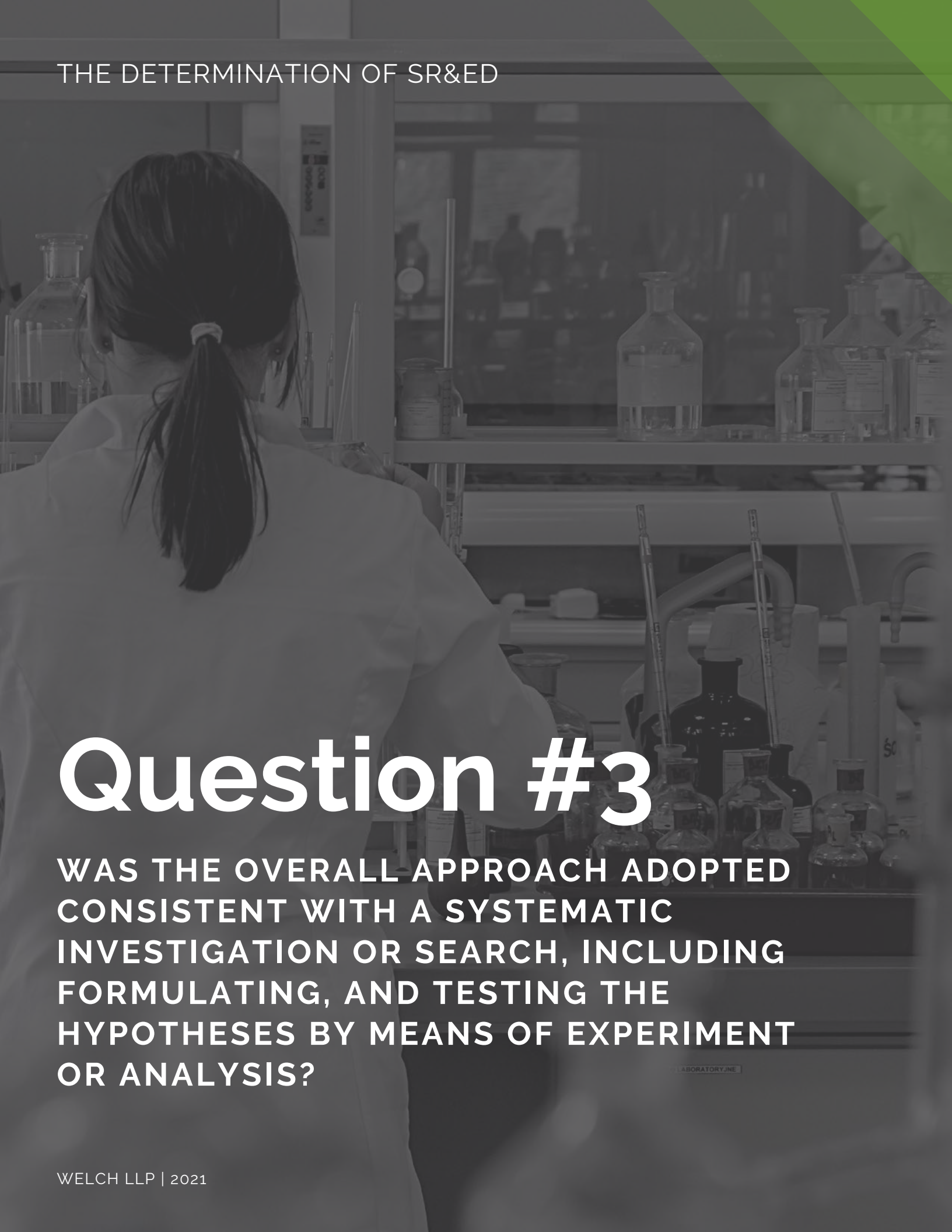
DID THE EFFORT INVOLVE FORMULATING HYPOTHESES SPECIFICALLY AIMED AT REDUCING OR ELIMINATING THAT UNCERTAINTY?

Question #2

Did the effort involve formulating hypotheses specifically aimed at reducing or eliminating that uncertainty?

In this context, a hypothesis can be thought of as a possible solution to the problem which attempts to resolve the uncertainty defined in Question #1.

This proposed solution should be consistent with the existing knowledge base and act as a starting point which encourages further investigation.



Question #3

WAS THE OVERALL APPROACH ADOPTED CONSISTENT WITH A SYSTEMATIC INVESTIGATION OR SEARCH, INCLUDING FORMULATING, AND TESTING THE HYPOTHESES BY MEANS OF EXPERIMENT OR ANALYSIS?

Question #3

Was the overall approach adopted consistent with a systematic investigation or search, including formulating, and testing the hypotheses by means of experiment or analysis?

This question is specific to the investigation conducted and it is expected that the investigation is a planned approach, which can be summarized as one which:

- Formulates a hypothesis/proposed solution to address uncertainties;
- Tests the hypothesis/proposed solution through systematic experimentation;
- Draws conclusions based on results of experimentation.

From this, we can recognize the three main components which define a planned approach:

1. Hypothesis/proposed solution formulation
2. Systematic investigation
3. Conclusions

Breaking these components down, we can shed some light on what is required to define an appropriate investigation.

HYPOTHESIS / SOLUTION FOMULATION

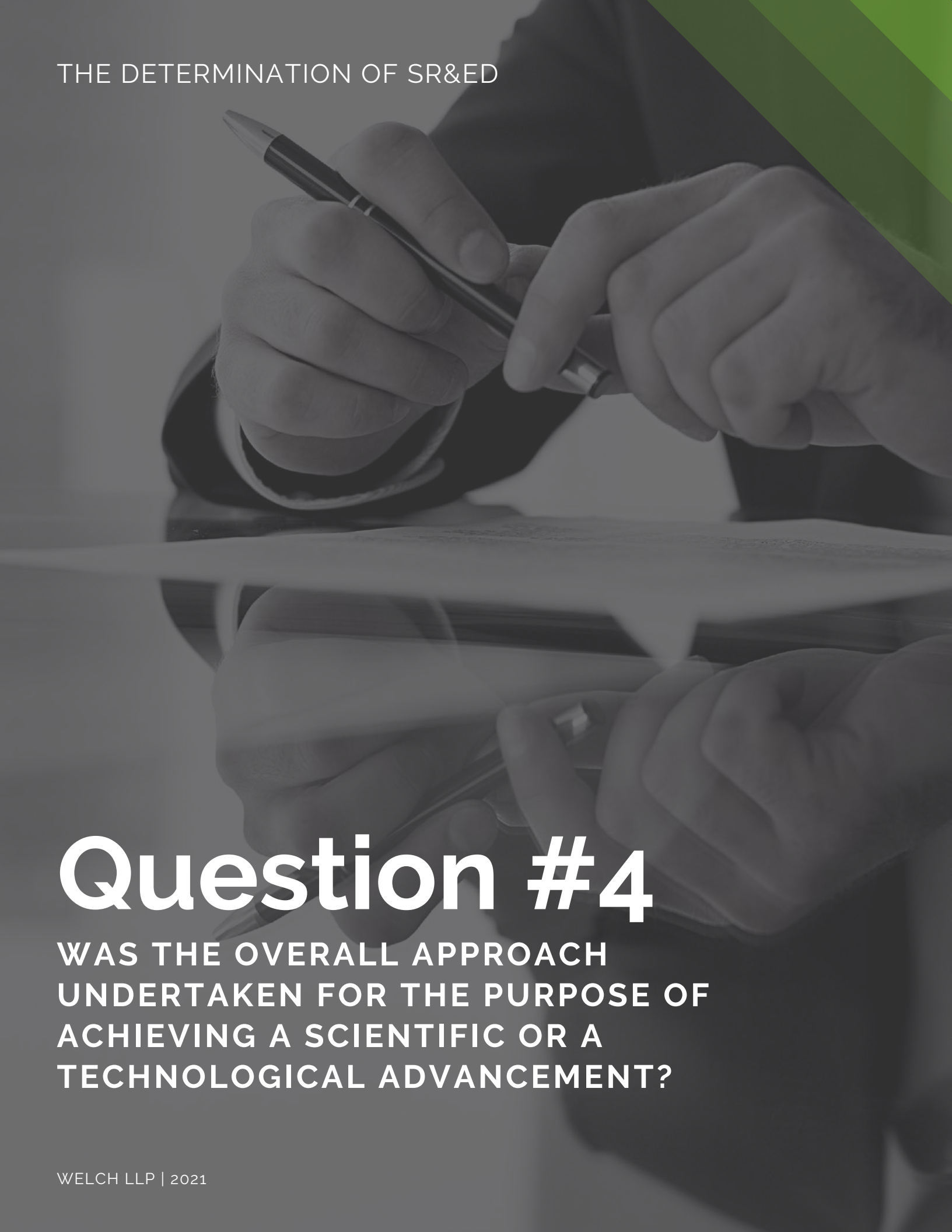
For this criterion, if an appropriate solution has been formed regarding Question #2 this will be fulfilled as a result.

SYSTEMATIC INVESTIGATION

A systematic investigation is one which not only addresses the uncertainties but does so using an iterative process, developing new or modified solutions based on new findings. This is typically recognized in industry as the evolution of prototypes or models. Additionally, a systematic investigation should keep a record of work which demonstrates that work is built on analyzing results at each iteration (which will be important in answering Question #5).

CONCLUSIONS

Stating your conclusions requires that you identify the results of your investigation, and their significance towards achieving an advancement. Framing your findings in this context will provide appropriate conclusions from the investigation.
With these components in mind, you can determine if your investigation is in fact a planned approach.



Question #4

WAS THE OVERALL APPROACH UNDERTAKEN FOR THE PURPOSE OF ACHIEVING A SCIENTIFIC OR A TECHNOLOGICAL ADVANCEMENT?

Question #4

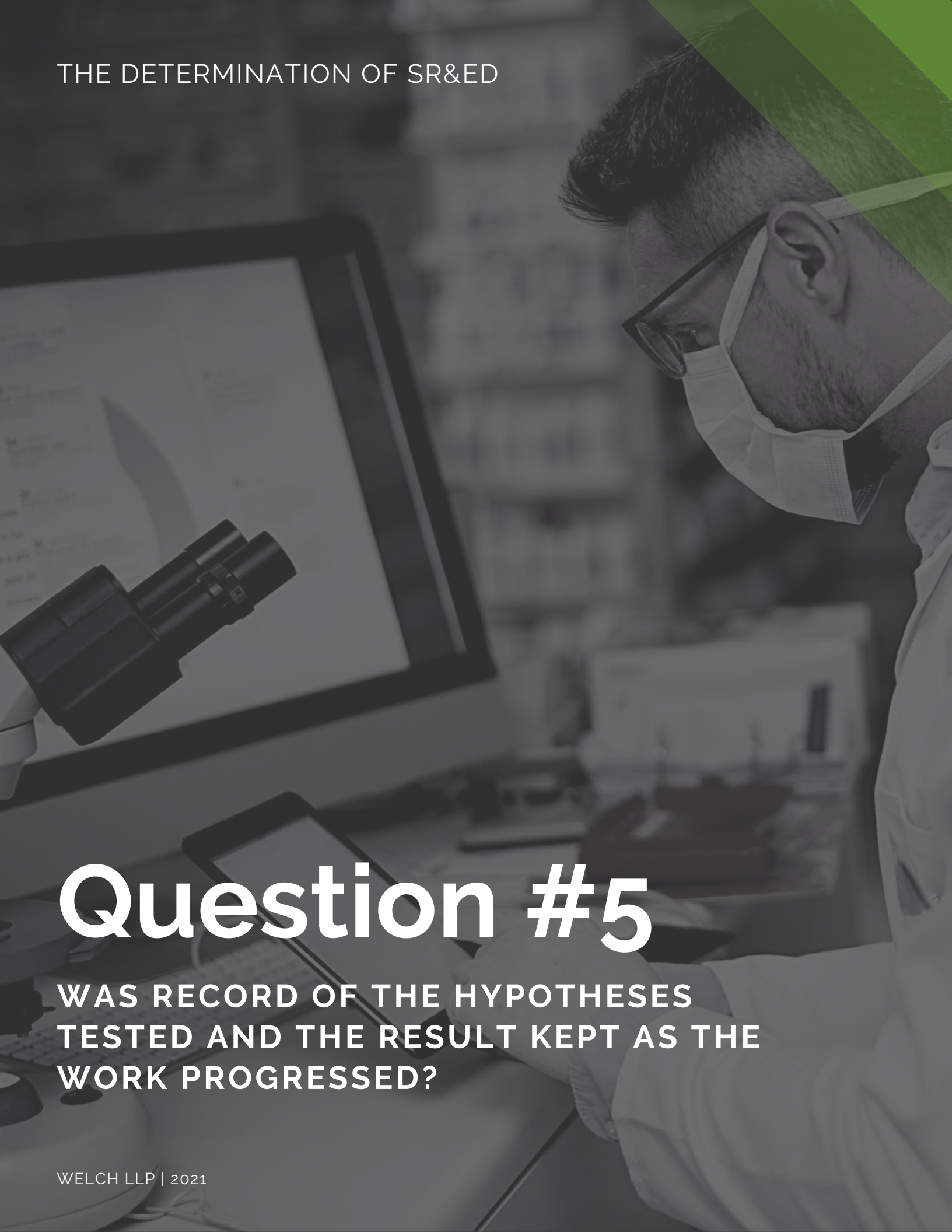
Was the overall approach undertaken for the purpose of achieving a scientific or a technological advancement?

This question is focused around the creation of an advancement. First, we should make note of what is considered an appropriate advancement for SR&ED purposes.

An advancement, by definition, should generate information or knowledge which progresses the understanding of science or technology, or the current knowledge base of the business as a result of addressing an uncertainty.

It is commonly recognized that in the pursuit of R&D, sometimes a solution or approach fails. By the definition provided for advancement, we can see that even a failure can lead to an advancement, as the failure can eliminate a potential solution, leading to an overall increase in the knowledge base.

With all this in mind, it is important to remember that SR&ED is not so much concerned with the outcome of the work (such as a new or novel product), but more so the journey which led to its creation. It is important to demonstrate that the research and experimental development which was implemented to create this product was not routine (or standard practice).



Question #5

WAS RECORD OF THE HYPOTHESES TESTED AND THE RESULT KEPT AS THE WORK PROGRESSED?

Question #5

Was record of the hypotheses tested and the result kept as the work progressed?

This question is concerned with a naturally produced track record of the experimental investigation conducted during the performance of SR&ED.

Throughout this investigation, a record of tests and results should be kept to demonstrate:

- Each major element of the investigation,
- If goals of the work are met,
- That a systematic investigation took place.

DOCUMENTING YOUR SR&ED

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Documenting Your SR&ED

Significant documentation should be recorded throughout the natural progression of your R&D to ensure you have created enough supporting evidence to satisfy CRA in the event of a review. This evidence will be used to support two aspects of your SR&ED claim: (i) the SR&ED work conducted; and (ii) the SR&ED expenditures claimed.

EVIDENCE FOR SR&ED WORK

With respect to the SR&ED work conducted, documentation should be produced as the work is performed. Documentation that is dated, signed and specific to the work performed will be the most valuable during a review. This supporting documentation can include: records of tests and results, project planning documents, documents on design of experiments, system architecture and source code (for software development), records of trial runs, test protocols, data, results, analysis and conclusions.

EVIDENCE FOR SR&ED EXPENDITURES

Records that support the claimed expenditures should also be kept in order to justify the financial transactions made throughout the R&D program which were claimed as SR&ED expenditures. These records and documents can include: financial statements, ledgers, receipts, contracts, purchase invoices and proof of payment, accounting records, time sheets, records of resources allocated to the project, and payroll records.

Documentation is essential to any SR&ED claim and it is very important to ensure that evidence is generated as SR&ED is carried out. In the views of CRA, the best documentation is that which is created through internal processes that collect information and generate reports/evidence as the work is performed. Diligent bookkeeping as well as thorough and contemporaneous documentation is crucial during a review and could save your SR&ED claim if it is ever pulled for audit.

CONCLUSION

In summary, the SR&ED program is a lucrative tax incentive for growing and developed businesses in the R&D sector and helps support valuable research across Canada. However, it comes with many intricacies which can be difficult to navigate. Our team at Welch hopes to make this journey easy, educational and successful to help you receive the SR&ED tax incentive you are entitled to.

Please feel free to reach out to Joshua Smith for more details about the SR&ED program and to determine if your project qualifies for SR&ED.

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