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# An introduction to AI in PR

Skills Guide

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# An introduction to AI in PR

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This guide is the first in a series of primers introducing artificial intelligence and its impact on public relations

## Learning outcomes

**In this guide you will learn:**

- A definition of artificial intelligence and its application to public relations
- Understand the threats and opportunities for AI in public relations
- What you can do to prepare

Artificial Intelligence (AI), the ability to imitate human behaviour, is not a catch-all term, and needs to be understood in many different ways. It has been suggested that it might be the single most disruptive technology the world has seen since the Industrial Revolution. But beware the hype. AI vendors make many promises.

The CIPR #AlinPR panel defines AI as follows.

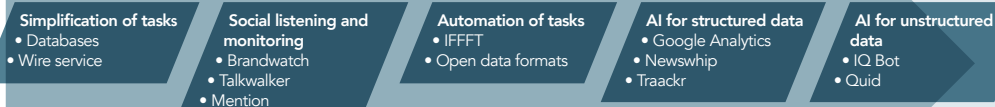
AI enables software to perform difficult tasks by learning through repetition rather than following a linear sequence of instructions. It enables large and complex tasks, often involving large amount of data, to be completed efficiently, inexpensively and at scale.

AI is disruptive because it enables machines to solve complex problems that would previously have required human capabilities.

This technology will materially change how we engage with the world around us. It's already changing not only how business is done, but also the kind of work we do. It will potentially unleash new levels of creativity and problem solving, if we keep control of its development and if we understand what it is and is not, and how AI works and what it can do for us.

The CIPR launched the #AlinPR panel in 2018 to explore the impact of AI on public relations practice and foster dialogue in the public sphere about issues related to AI. The #AlinPR panel proposed a five-level scale to demystify AI, automation and machine learning as it relates to public relations.

## CHARACTERISATION OF TOOLS IN PUBLIC RELATIONS



There are software tools that simplify tasks, some that automate rote tasks and more sophisticated algorithms that analyse and predict outcomes and it is these latter types of tools that truly use AI. The CIPR #AlinPR panel has crowdsourced more than 130 tools used by public relations professionals using the five-point scale.

## Threat and opportunity of AI for public relations

AI and automation are possible because many skilled jobs follow the same general workflow:

- 1 Gather data
- 2 Analyse the data
- 3 Interpret the results
- 4 Determine a recommended course of action
- 5 Implement the course of action

Table 1: Typical workflow of a professional job

We can look at any number of professionals to see that the workflow in Table 1 holds true. Doctors perform tests, analyse the results, interpret the results to make a diagnosis, plan a course of treatment, and then set a course of action,

Likewise financial advisors, management consultants, solicitors and of course public relations practitioners. Many professional activities follow the same workflow and can therefore be augmented by a machine.

IBM's Watson is already cracking medical mysteries by analysing large numbers of cases and science. Investors are fleeing expensive, actively managed funds for better-performing ones whose management is overseen by a machine.

When we think of automation, we mean tools that send us reminders, can place phone calls for us, respond to voice commands and handle our appointments. These are far more prevalent in our lives even compared with two years ago. And the level of sophistication continues to make our lives easier. But none of that uses full AI.

Chatbots are an example of an application at the intersection of automation and AI. They are automated scripts, fed and refined by humans but capable of handling conflicting or unclear questions. Indeed, some bots can learn from interactions – so called machine learning – which brings these tools into the AI sphere.

## Data, AI and machine learning

Machine learning is AI. It is made possible by the sheer amount of data that we share and is housed in the cloud and within applications we download. **Here are some startling statistics that literally make AI possible:**

- The data volumes are exploding. More data has been created in the past two years than in the entire previous history of the human race.
- Data is growing faster than ever before and by the year 2020, about 1.7 megabytes of new information will be created every second for every human being on the planet.

Without data, there is no AI. More data makes it easier to map out the human patterns the machine is seeking to imitate.

If we consider data as fuel, then algorithms are the instructions that run AI. A specific software application sorts through almost infinite options and scenarios specific to the task it is to perform and offers the best option based on the task set.

This brings us to the pitfalls of AI. The echo chamber effect, bias, ethics, privacy of data and quality of inputs are the issues to watch and understand in how AI is deployed.

When we like something in our social media feeds and subsequently, almost magically, here comes a post or an ad for the very same type of thing we searched or liked – that is the echo chamber. It restricts what we see to only what we like or are predisposed to read. It does not offer us a critical perspective unless we seek it.

Algorithms are built on analysis of such patterns. Nuance is not the forte of algorithms, which is why the CIPR argues that humans will be needed at almost every step along the increasingly steep AI curve.

Primers published by the CIPR #AIinPR panel during 2019 will develop the themes outlined in this paper.

## Glossary

**Algorithm:** An algorithm is a detailed series of mathematical instructions or rules for carrying out an operation or solving a problem, especially by a computer. Algorithms can perform calculations, data processing, automated reasoning, and other tasks.

**Artificial intelligence (AI):** AI is the capability of a machine to imitate intelligent human behaviour. It is also a branch of computer science dealing with the simulation of such behaviour in computers. There are three types of AI: narrow (focused on a specific task/ can be dubbed 'automation'), general and super. AI includes various fields of study, including machine learning (ML), natural language processing (NLP) and audio, image and video recognition.

**Automation:** Automation is the method of making a machine, a process, or a system perform repetitive, monotonous tasks, ultimately driven by manual configuration.

**Bias:** This is a phenomenon that occurs when an algorithm produces results that are systematically prejudiced, due to erroneous assumptions created by the author. Bias can emerge due to many factors – including but not limited to the design of the algorithm itself, unintended or unanticipated use or decisions relating to the way data is coded, collected, selected or used to train the algorithm. Bias can result in systematic and unfair discrimination – from inadvertently impacting privacy violations to reinforcing social biases of race, gender, sexuality, and ethnicity.

**Chatbot:** A chatbot or artificial conversational entity (ACE), is an AI programme that simulates interactive human conversation by using key pre-calculated user phrases and voice or text-based signals.

**Data:** Information, especially facts or numbers, collected to be examined and referenced in research, or decision-making. Data can be 'machine readable' (ie. it can be read or used by a computer) or not, depending on the format in which it is recorded. For example, spreadsheets are generally machine readable whereas some PDF documents are not. Data exists on a spectrum from closed, to shared, to open.

**Machine learning (ML):** this is a current application or subset of AI, using pattern recognition and algorithms to enable machines to accelerate learning through experience. The results of ML depend on the quality, objectivity and size of learning data sets.

## References and further reading

CIPR #AlinPR panel [www.cipr.co.uk/AI](http://www.cipr.co.uk/AI) CIPR #AlinPR crowdsourced tools: [https://docs.google.com/spreadsheets/d/1uYmg4fJVtrJeWczLdd7BHZ\\_3Kjmw6VeF9hMBpz7nBs/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1uYmg4fJVtrJeWczLdd7BHZ_3Kjmw6VeF9hMBpz7nBs/edit?usp=sharing) (Accessed 25 June 2019)

IBM Watson Cognitive Health Solutions  
[www.ibm.com/watson/health/](http://www.ibm.com/watson/health/) (Accessed 25 June 2019)

Why Passive Investing is Overrunning Active, in Five Charts  
[www.wsj.com/graphics/passive-investing-five-charts/](http://www.wsj.com/graphics/passive-investing-five-charts/) (Accessed 25 June 2019)

How Much Data Do We Create Every Day? The Mind-Blowing Stats Everyone Should Read? [www.forbes.com/sites/bernardmarr/2018/05/21/how-much-data-do-we-create-every-day-the-mind-blowing-stats-everyone-should-read/#1106b9f060ba](http://www.forbes.com/sites/bernardmarr/2018/05/21/how-much-data-do-we-create-every-day-the-mind-blowing-stats-everyone-should-read/#1106b9f060ba) (Accessed 25 June 2019)

Big Data: A Big Impact on Efficiency?  
<https://watb.co.uk/blog/big-data> (Accessed 25 June 2019)

The ODI Data Spectrum helps you understand the language of data:  
<https://theodi.org/about-the-odi/the-data-spectrum/> (Accessed 25 June 2019)

## Biography

Jean Valin is Principal of Valin Strategic Communications. He was a senior executive in the Canadian government where he served for thirty years. He is co-editor of the textbook Public Relations Case studies from around the World and is a founding member of the Global Alliance for Public Relations and Communication Management.

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