

Co-authored by Chris Burton CPBP FRSA Shay Deeny BSc (Hons) MSc Regardless of their size, industry or location, organisations today are facing an expanding range of swiftly-evolving and unexpected challenges – from the specific demands of the COVID–19 pandemic to hypercompetivity, globalisation and rapid technological advancement. To ensure survival and success, organisations need to be able to adapt quickly and often, by adopting the principles of *organisational agility*.

90% of CEOs believe organisational agility is 'very' or 'extremely' important for success.

Vessel & Gopal, 2020

For more information: info@designed4success.co.uk +44 (131) 357 0369 Early in our research, we began investigations into both *cognitive diversity* and *organisational agility* as two separate entities.

There is not currently a wealth of existing research on these topics, and we quickly discovered an overlap between both areas – and also that cognitive diversity is only one of several factors which act as drivers for organisational agility. Deeper analysis led us to identify a number of other, equally important components which, when combined with cognitive diversity, appear to drive true organisational agility. Our model for organisational agility comprises two main factors:

Collective intelligence:

This is a psychological factor which is composed of *cognitive diversity, cognitive*

versatility, cognitive drive and *social sensitivity.*

Adaptive innovation:

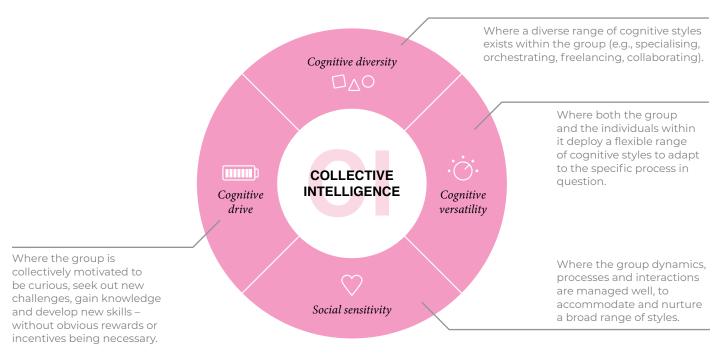
This is a process factor composed of five stages – *stimulation, ideation, evaluation, optimisation* and *implementation*. In addition, we identified that *cohesion/stability* and *conflict/instability* also play key dynamic roles within the adaptive innovation process.

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COLLECTIVE INTELLIGENCE



Collective intelligence encompasses a number of psychological factors, including cognitive diversity. Importantly, the benefits of cognitive diversity are enabled through collective intelligence; poorly managed, cognitive diversity will have little benefit, and may even be detrimental to group performance.

For more information: info@designed4success.co.uk +44 (131) 357 0369 For our model, *collective intelligence* is the psychological composition of a team derived from group structure, attitude and mindset.

Interestingly, individual IQ is *not* a primary factor in collective intelligence. We surmise that a group consisting only of individuals with high (or low) IQs may have a negative effect on collective intelligence, whereas a broader distribution of IQs does not result in these negative correlations.

1. Cognitive diversity

This is achieved when we see a diverse range of cognitive styles within the group (e.g., *specialising, orchestrating, freelancing, collaborating*). These styles are defined as 'a person's mode of perceiving, thinking, remembering and problem solving' and are only modestly linked to demographic diversity. So, a group of demographically diverse individuals (with different ages, genders, and ethnicities, for example) may not necessarily embody cognitive diversity – whereas a group of demographically similar individuals may have much more cognitive diversity than we might think. Therefore, organisations wishing to achieve collective intelligence should not rely on demographic diversity to 'deliver' cognitive diversity.

It's also important to note that cognitive diversity needs to be nurtured over time, by providing a suitable environment and culture for different styles to thrive.

2. Cognitive versatility

At an individual level, people may have two or more cognitive styles which they deploy at different times. Collective *cognitive versatility* is achieved when the group allows and exercises a flexible range of cognitive styles, by adapting to the specific process at hand.

3. Cognitive drive

Intrinsic motivation is seen when individuals have spontaneous tendencies to be curious, exercise and hone their skills and knowledge, and seek out challenges, even in the absence of rewards. When the group displays this behaviour, we call it *cognitive drive*. It can be seen as the force that helps organisations to constantly evolve through an innate tendency to *explore, question* and *experiment*.

4. Social sensitivity

Social sensitivity is the ability of the group to manage its individual relationships, enabling different cognitive styles to flourish, helping the group to apply different styles when necessary and facilitating spontaneous and productive curiosity. Poorly managed group dynamics and processes can lead to lower performance.

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ADAPTIVE INNOVATION

How collective intelligence plays a role at each stage of the adaptive innovation process:

Stimulation

Cognitive drive plays a key role in the active 'seeking' behaviours required for curiosity into abstract opportunities.

Ideation

Cognitive diversity and cognitive versatility provide a breadth of knowledge, perspectives and the flexibility of approach required for a rich output of ideas.

Evaluation

Cognitive diversity and cognitive versatility allow ideas to be judged from numerous perspectives, while social sensitivity creates an inclusive culture of respect, especially as the dynamic shifts from conflict to cohesion.

Optimisation

Cognitive diversity and cognitive versatility help to refine ideas, with social sensitivity providing the balance to move things forward smoothly.

Implementation

Cognitive drive is reintroduced as the most critical component for perseverance and momentum. Social sensitivity helps to manage criticism and create solidarity.

The adaptive innovation process cycle has five segments that are 'powered' by provocation, curiosity and/or dissatisfaction with the status quo.

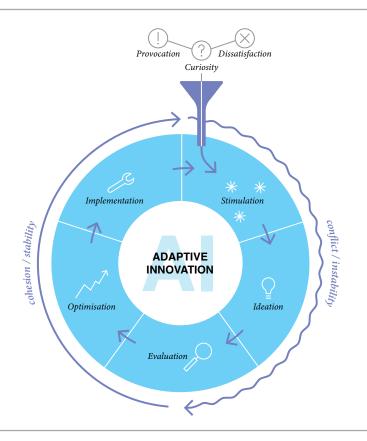
Importantly, the process utilises a cyclical shift from conflict/ instability to cohesion/ stability in order to facilitate more productive innovation.

For more information: info@designed4success.co.uk +44 (131) 357 0369 Adaptive innovation aligns closely with the demands of a hypercompetitive market, rapid technological advancement, globalisation and potential crises. It pre-empts and responds not only to conditions that currently exist, but also to unlikely situations that may *potentially* occur in future – often taking place much *earlier*, *continually and speculatively* than is the case with traditional innovation.

Ideas are constantly reworked, revised and recontextualised in a perpetual cycle with no periods of dormancy.

1. Stimulation

The innovation process is sparked by *provocation* (unexpected external forces or events, e.g. COVID-19), *curiosity* (an ongoing search for latent opportunities, enabled by cognitive drive), or *dissatisfaction* (a constant analysis and evaluation of the status quo to expose weaknesses and opportunities). This stage is facilitated through the lens of *conflict/instability*, where



a sense of 'upheaval' has a positive effect.

2. Ideation

This is the part of the process where ideas are generated within an environment where barriers, boundaries, rules and limitations are minimised. Again, the process will benefit from a state of *conflict/instability* where the status quo is constantly challenged and *divergent* thinking is encouraged.

3. Evaluation

Idea exploration. This is where ideas are stress-tested and debated robustly and comprehensively – facilitated through constructive *conflict*, embracing a sense of *instability*.

Idea selection. This is where the group commits to the most successful, practical ideas that have been generated. The working dynamic shifts to *cohesion*, enabling a sense of *stability*. Any ideas that are shelved may end up returning to circulation at a later date, based on their merit and relevance to future challenges.

4. Optimisation

This is where the idea is refined and contextualised through the lens of *cohesion/ stability*. The barriers, boundaries, rules and limitations that were relaxed in the ideation stage are now reinstated. At this point the group thinking needs to *converge* towards making the idea as robust as possible. If the idea cannot be optimised, the group may return to the ideation stage or revisit a previously shelved idea.

5. Implementation

This is where the idea is successfully realised externally and any criticisms are overcome. The dynamic then shifts again to *conflict/ instability* and the cycle repeats.

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WORKING IN SYNERGY FOR MORE POSITIVE OUTCOMES

Organisational agility will only stem from the synergy of both collective intelligence and adaptive innovation.

'Agility' is the power to move quickly and easily, and the ability to think quickly and clearly.

In a modern VUCA world (Volatility, Uncertainty, Complexity, Ambiguity), agility becomes essential for survival and success – converting to 150% higher return on invested capital and 500% higher return on equity.

Pulakos, Kantrowitz & Schneider, 2019

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Not simply a crisis management tool

COVID-19 has shown that our ability to adapt to unexpected circumstances varies greatly from one organisation to the next. While some have opted to spend capital reserves or rely on emergency funding, others have been able to pivot quickly to capitalise on new opportunities. This culture of agility can be seen in any size of organisation, across all sectors, anywhere in the world. And, although COVID-19 has amplified the importance of agility, it is not simply a crisis survival tool – this way of working is sustainable over the long-term. Indeed, it could be argued that an agile approach may become essential for success in today's hypercompetitive VUCA market.

Scientifically robust

The theory is also backed by robust science. For example, intrinsic motivation comes from the evolution of 'seeking' behaviour in mammals, which chemically rewards individuals with dopamine for engaging in certain exploratory activities.

Nurturing an agile culture

ADAPTIVE

INNOVATION

Organisational agility should not be looked upon as a 'toolkit' that can be readily installed. Instead, it requires a paradigm shift across all levels of an organisation, achievable through the synergy and dynamic interplay of both collective intelligence and adaptive innovation.

This will require constant re-evaluation. For example, cognitive diversity may deplete over time if a particular cognitive style starts to become dominant, creating a 'groupthink' pattern, or if the group becomes homogenised through conformity. Therefore, it is essential to encourage enough psychological safety and self-awareness for the group to shift its distribution of cognitive styles when required.

AGILITY

The value of conflict

ORGANISATIONAL

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In addition, conflict and instability strongly differentiate adaptive innovation from traditional innovation – to provide the necessary urgency, gravity and awareness for rapid and fruitful adaptive innovation. This is why social sensitivity plays such a key role, governing and moderating the levels of conflict/stability to ensure that all voices are heard and everyone within the group has made a valuable contribution. This, in turn, ensures that selected ideas are endorsed by all, which can also help to recruit new supporters to the idea.

By engendering a culture built around the momentum of curiosity, resilience, energy and intrinsic motivation, the overall outcome is that opportunities are more quickly detected, crises and mistakes become learning opportunities, ideas are more easily generated, and initiatives are more successfully realised.

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