

# WORKPLACE **P I N**

PERFORMANCE INNOVATION NETWORK

## THE 6 FACTORS OF KNOWLEDGE WORKER PRODUCTIVITY

... THAT CHANGE EVERYTHING



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In 2014 The Research Group within AWA's Workplace Performance Innovation Network (PIN) undertook an extensive study involving a review of over 800 academic research papers to answer two key questions:

1. What is known from the world's academic research about the measurement of Knowledge Worker Productivity?
2. What is known in the world's academic research about the factors associated with Knowledge Worker Productivity?

What emerged was a deep understanding of the world of Knowledge Work and 6 organisational factors that are proven to be associated with Knowledge Worker Productivity. We believe that when the leaders of Knowledge businesses understand these factors they will have a profound impact on the design of organisations, culture, leadership competences and workplace infrastructure in the future. The findings provide new 'design requirements' for everything associated with the organisation.



## THE STUDY

The study was undertaken in 2014 in partnership with The Centre for Evidence Based Management (CEBMa) a global network of academics that teach and practice 'Evidence Based Management' in some of the worlds most respected universities.

AWA along with sponsors set the research agenda, CEBMa used its highly scientific 'Rapid Evidence Assessment' methodology to undertake a review of the world's most credible academic databases and AWA used its knowledge and experience to translate from the academic world to the business world. Consequently the results of this work can be relied upon as the 'best science' available on this subject at this time.

This short report sets out the answers to the research questions and a description of the 6 Factors of Knowledge Worker Productivity. Senior leaders will find the 6 factors a powerful baseline for re-thinking the way everything in their organisations works.

## THE SPONSERS

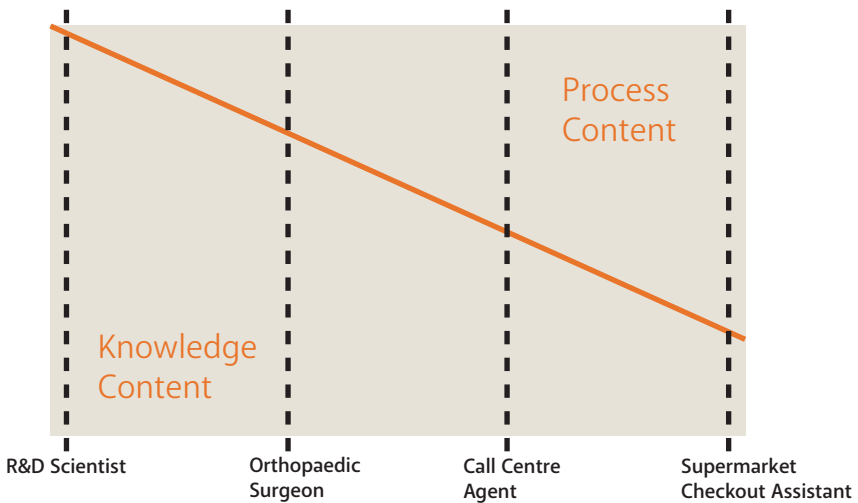
We are grateful to AllSteel, Allied Bakeries, BDO, BP, The British Council, Old Mutual Wealth, Telereal Trillium and The Royal Bank of Scotland, for their intellectual and financial support for this study.



## KNOWLEDGE WORK

The term Knowledge Work was originally defined by Peter Drucker in 1956. Knowledge Workers are people who 'think for a living' and Knowledge Organisations are those that predominantly depend on knowledge in order to design and deliver their commercial value.

All jobs have some element of knowledge needed to deliver their tasks. However in the Knowledge Economy jobs often don't have a tangible output (like a product or service). These jobs are at the extreme end of the Knowledge Work Spectrum. In these roles people are being paid to think, fusing their knowledge with that of others to provide new knowledge which ultimately translates into a commercial value. At the right hand other end of the spectrum, roles have much less dependency on knowledge and a greater dependency on adherence to a well-defined process.



Between these two ends of the spectrum there are of course many roles with differing levels of 'Knowledge' content. Our research findings have greater significance the further left you are on the Knowledge Worker Spectrum.





## Q1 What is known in the world's academic research about the measurement of Knowledge Worker Productivity?

Many researchers around the world have been in search of a 'Holy Grail' measurement of Knowledge Worker Productivity for many years.

In reviewing the research our emphatic conclusion is that Knowledge Work is so varied and its outputs so intangible that it is not possible to come up with a single universal measure for Knowledge Worker Productivity.

We also concluded that traditional measures of output per unit of production like 'calls per agent per hour' or 'units per week' or 'cost per unit' are inappropriate for Knowledge Based businesses. In fact, they drive the wrong behaviours and have a potential to destroy the value of organisations.

Whilst we recognise that a universal measure of productivity for Knowledge Workers is inappropriate, we do believe it is appropriate to generate a 'proxy' measurement of the 6 factors that are proven to be linked to Knowledge Worker Productivity. We call this KWPPS.



## Q2 What is known about the factors associated with Knowledge Worker Productivity?

Through the Research Review, 6 factors emerged as having the greatest association with Knowledge Worker Productivity. Most of the research from which these factors were derived was associated with studies and trials of teams involved in Knowledge Work.

The 6 Factors that had the highest statistical association with Knowledge Worker Productivity were as follows - we refer to these as the 6 factors of Knowledge Worker Productivity:

1. Social cohesion
2. Perceived supervisory support
3. Information sharing / Transactive Memory System
4. Vision / goal clarity
5. External communication
6. Trust





'Social Cohesion: A shared liking or team attraction that includes bonds of friendship, caring, closeness and enjoyment of each other's company.'

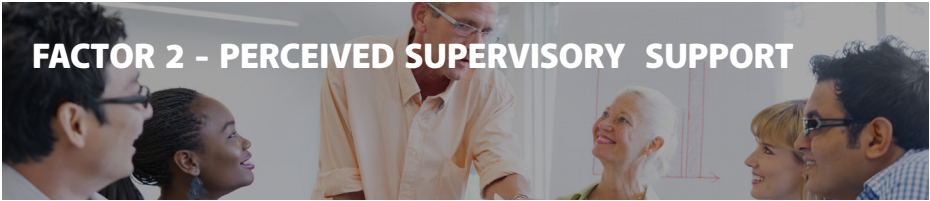
**In other words...** people get on with each other, are happy to share their ideas and knowledge with each other for the good of the team and the organisation. They are comfortable to challenge the ideas of others and be challenged themselves without feeling offended, insulted or disadvantaged. They feel safe in saying their piece regardless of the seniority or importance of others. Social cohesion applies to a team, between teams and up and down the organisation in order that the whole of the Knowledge Worker community shares a strong sense of cohesion and comfort in speaking out.

### Why is this important?

Quite simply, in the Knowledge business every person is a knowledge asset bringing to the team and organisation the knowledge, experiences and relationships gathered throughout their lives. It is the fusion of their knowledge, experiences and relationships with those of others in the organisation that create the new knowledge that propels the organisation forward and eventually turns into commercial value. However to make the organisation work, people need to be willing and comfortable to contribute their knowledge and ideas. Put another way, if an individual or team's knowledge becomes 'land locked' for any reason then that knowledge is denied to the organisation.







## FACTOR 2 - PERCEIVED SUPERVISORY SUPPORT

'Perceived Supervisory Support: How employees feel the supervisor helps them in times of need, praises them for a job well done, or recognises them for extra effort'.

**In other words...**people need to feel that the person they report to is positively supporting them in helping them in achieving their endeavours and not constantly 'beating them up' or blaming them for apparently substandard tasks. This means 'supervisors' proactively developing professional relationships with team members, providing coaching, resources and support to help people do their best and encouraging judicious risk taking. And when life is tough providing a sympathetic hearing.

### Why is this important?

In Knowledge Organisations the role of 'supervisor' is an important one in which the holder has the power to set the atmosphere within the team to help each individual complete their tasks, contribute their knowledge and ideas and work in harmony with other team members and other teams. If a supervisor does not exhibit support for colleagues this may create an atmosphere in which people hold back their best, don't feel safe to express their ideas and retreat into doing the least needed to get the job done without care for its meaning.





## FACTOR 3 - INFORMATION SHARING

'Information Sharing: Refers to how teams pool and access their knowledge and expertise – which positively affects decision making and team processes. This leads to the idea of a team 'Transactive Memory System' (TMS) which can be thought of as a collective memory in a collective mind – enabling a team to think and act together.'

**In other words...**it's about creating a culture and infrastructure for sharing knowledge and treating the whole team and the wider community as a 'knowledge memory' so that team members can short circuit the search for the best sources of knowledge and avoid re-inventing the wheel. It's about allowing people to find out who has what knowledge and experience (regardless of however relevant or irrelevant it is in the moment). And it's about capturing this knowledge in a system or a 'knowledge register' and re-enforcing sharing by rewarding good sharing behaviours in all employees regardless of seniority, power or personality.

### Why is this important?

Knowledge is power so they say, and in traditional organisations people can often hold back on sharing their knowledge with others within their team, in other teams and in other divisions for fear that their 'knowledge generosity' will lead to their own power being diminished. If this culture prevails the organisation will be starved of the knowledge these people could bring and constrain the 'generosity' of others.



## FACTOR 4 - VISION / GOAL CLARITY

'Vision and goal clarity: The notion of vision refers to the extent to which team members have a common understanding of objectives and display high commitment to those team goals. For this reason 'vision' on the team level is also referred to as goal clarity.'

**In other words...**for people to be emotionally engaged with the work they do they need to understand how it fits into their teams vision and goals. Further they need to know how their team's vision and goals fit with the enterprise's vision and goals. They also need to feel an empathy with the vision of the team and the enterprise in order to be prepared to release all their intellect and time to the tasks they perform being prepared to go the extra mile, to commit.

### Why is this important?

We all need something that gets us out of bed every morning and to do the right thing for the organisation. If we're not clear about how what we do fits into what the team is doing, now and in the future, we're not going to be able to get emotionally engaged and give our best. And if we don't understand how what the team does contributes to the success of the enterprise, it's even more difficult to give our best. If the enterprise doesn't articulate a vision or the vision isn't 'worthy' it may be difficult for us to commit our intellect and energy to the cause.



## FACTOR 5 - EXTERNAL COMMUNICATION

'External Communication: The ability of teams to span boundaries (team and organisational) to seek information and resources from others.'

**In other words...**'get out more'. Too often people spend their time at work cocooned in their own world and that of their team. With this factor we are talking about people exposing themselves to the views and experiences of diverse groups of people outside their team and organisation in order to shape their ideas and bring back new ideas and insights to the organisation to fuel innovation.

### Why is this important?

If people gain all their understandings, insights and knowledge from within the organisation there is a danger of 'group think' in other words people gain comfort in thinking that the work the organisation is doing is leading edge. People become very wedded to their own ideas and reject ideas that were 'not invented here'. Without exposing your people to the outside world through events, reading, social networks or professional institutions there is a danger that their 'knowledge assets' become out of date, devoid of challenge and new thinking. Your people's knowledge becomes obsolete.



## FACTOR 6 - TRUST

'Trust: The firm belief in the reliability, truth or ability of others. It is created by the expectation that the actions of other persons will be to ones benefit or at least not detrimental to him or her.'

**In other words...**people need to feel that those around them will act in their interest, that the knowledge they contribute will be used responsibly and in their interests and that they can depend on the knowledge, advice, skills and abilities of their colleagues. So we are dealing with two distinctly different things: firstly competence and secondly the feeling that people will not act in ways that puts their own interests before ours or the teams.

### Why is this important?

If you perceive that the knowledge or information provided by a colleague is not credible (because of rumour, previous experience or your 'gut feel'), you will not use their knowledge and therefore their value diminishes. If you perceive that someone is going to use your information or knowledge for their own benefit over and above the team's you will stop giving your ideas and knowledge and co-operation willingly.





The 6 factors as outlined here have been derived through a scientifically robust review of over 800 research studies. The papers were published in English, the lingua franca of scientific research and studies were undertaken in many leading academic institutions across the world. We believe that our work therefore represents the best science in relation to Knowledge Worker Productivity generated anywhere in the world.

Over the course of the study our team have realised the power of these findings.

Imagine if a leadership team were to apply the 6 factors across all aspects of their organisation so that every function was focused on creating the conditions to give Knowledge Workers their best chance of being effective? What if leadership teams were brave enough to start again with a blank sheet of paper?

What would it mean for leaders, leadership and team behaviours? What might it mean for communication? What would it mean for recruitment? What would it mean for the shape of the organisation and the way objectives and goals are set? What would it mean for the coaching support provided to individuals? What might it mean for the performance management system? How could we re-focus IT investments and training to help achieve the 6 factors? How would we shape our workplaces to facilitate the 6 factors. Finally, how would we bring the disciplines together to make real change happen?

But the 6 factors are not simply for strategic leaders prepared to take a blank sheet. They also provide guidance for team leaders wanting to improve the performance of their teams and business leaders seeking to take a more evolutionary approach to Knowledge Worker Productivity.





In the course of our work on this study AWA's team have constructed a survey tool that allows team members to answer a series of 'validated' questions from which a Knowledge Work Productivity Proxy Score KWPPS can be developed for teams.

Whilst the score is useful as an overall measure of the conditions that propagate Knowledge Worker Productivity, it is most powerful when used with teams to help them assess themselves and determine actions to improve their performance on the 6 factors.

AWA have also developed a comprehensive organisational assessment tool to establish the effectiveness of organisations against the 6 factors along with a series of workshops, coaching sessions and interventions to assist organisations in applying the 6 factors.



## ABOUT THE RESEARCH TEAMS



### AWA ADVANCED WORKPLACE ASSOCIATES LTD.

AWA (Advanced Workplace Associates) is a leading change management practice that uses workplace science to make a step change in organisational performance.

## WORKPLACE



PERFORMANCE  
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NETWORK

### THE WORKPLACE PERFORMANCE INNOVATION NETWORK (PIN)

The Workplace PIN is AWA's network designed to support innovative leaders who want to make a step change in the performance of their organisations by applying evolving workplace science to work, the workplace and organisational design.



CEBMa

Helping managers and organisations  
make better decisions

### THE CENTRE FOR EVIDENCE BASED MANAGEMENT

The Center for Evidence-Based Management (CEB-Ma) is a non-profit member organisation dedicated to promoting evidence-based practice in the field of management. CEBMa provide support and resources to managers, consultants, organizations, teachers, academics and others interested in learning more about evidence-based management.

### EVIDENCE BASED MANAGEMENT APPROACH

The starting point for evidence-based management is that management decisions should be based on a combination of critical thinking and the best available evidence. By 'evidence', we mean information that comes from scientific research, internal business information and even personal experience. In principle, then, all management decisions need to be based on real 'evidence' derived through a scientific process. This process not only involves knowledge of the research field and methodology, but also – and particularly – teaching students and managers how to think scientifically in order to counterbalance to subjectivity of their own judgement.



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## AWA'S SUPPORT TEAM



**Andrew Mawson**

Managing Director, AWA

Founding Director of AWA and a leading thinker on the evolution of work and the workplace. A respected business leader, leading AWA through three recessions and undertaking projects for some of the world's leading organisations.

Passionate about the unanswered questions that trouble organisations, Andrew pioneered the formation of the Research Group to fuse academic research with practical application. He is closely involved in the Research and guides the programme's development.



**Karen Plum**

Director of Research & Development, AWA

Workplace Cultural Change specialist and leader of AWA's Workplace PIN – both the Agile Transition and Research Groups. Worked on the implementation of change strategies associated with the introduction of flexible and agile ways of working.

Successfully led the PIN's first two research programmes on Productivity and Virtual Workforces and will lead the research through 2015, drafting guidelines, developing practical tools and running workshops for Sponsors.



## CEBMA'S SUPPORT TEAM



### Prof Rob Briner

Professor of Organisational Psychology, University of Bath  
Vice Chair of the CEBMa Academic Council, passionate about helping practitioners and organisations make better use of evidence, including research evidence, in decision-making. A much respected, influential thinker, he often questions the received wisdom found in 'cutting-edge' ideas and so-called 'best practices'.

Rob provides essential interpretation and guidance of the PIN research findings to ensure the conclusions are rigorous and robust.



### Eric Barends

Managing Director, Centre for Evidence-Based Management  
Advises management teams and boards of directors of large / medium-sized companies / non-profits on evidence-based management and management development. Runs training courses on this topic and is a visiting lecturer at several universities and business schools.

Eric leads the PIN research activity, working with a team of researchers and in consultation with academic experts and the CEBMa Advisory Board.



### Prof Denise Rousseau

Professor of Organizational Behaviour and Public Policy, Carnegie Mellon University

Past president of the Academy of Management and prolific author (12+ books and 160+ articles). Her teaching translates organizational research into evidence-based, positive professional practices benefiting firms, workers, and other stakeholders.

Denise is Chair of the CEBMa Academic Council and provides valuable advice and guidance to the Research Team, critically appraising the research findings.





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