

# MAS Digitales Bauen CAS Potenziale und Strategien Extended Abstract

## Growth Mindset: BIM process development in Architectural Practice Impact on Employee Retention

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**Summary.** Progressive development and encouragement of a Growth Mindset would ensure a resilience and robustness for any organisation faced with the associated process changes that BIM and VDC intrinsically demand. This report presents framework and toolkit for gradual permeation of such a mindset into the core values of a company.

### 1. Introduction

*You never change things by fighting the existing reality.  
To change something, build a new model that makes the existing model obsolete.  
R. Buckminster Fuller*

In the role of the Internal BIM Manager<sup>1</sup> (IBM) in an architectural practice one is often confronted with BIM denial. While attempting to engage key players in the decision making process, the discussion frequently turns to the fundamental questioning of its value, from first principles. It is a powerful distractor and has the potential to derail progress. Navigating and neutralising this discussion is both an energy drain and wasteful. Negative friction is however a reality.

BIM has long since been identified as a Trojan horse for change within the construction industry. In order to be equipped with a tool kit to successfully implement new procedures an IBM must exude a commitment to undertake Continuous Professional Development with regard to procedures and technological developments in the field. An employer can expect this as a given. There are a myriad of well-honed best practice templates and guidelines available for orientation purposes. These ever-evolving reference documents draw from innovative management and planning processes which have been adapted from LEAN principles and tried and tested procedures from other fields. It is one thing to convey new procedures, to report from the front, but it is quite another to have the skill-set to build team engagement with this evolution. LEAN addresses process waste. There is unaddressed added value in minimising the associated behavioural and emotional waste.

Knowing in principle what one ought to do and knowing how to navigate the resistance to change which one encounters are two very different things. The apparent willingness of the tech industry to operate in beta-modus, to take risks, and subsequently course correct where necessary serve as a marked contrast to set-in-stone management practices most commonly encountered in architectural practice. The iterative processes and heightened levels of communication required to establish key VDC outcomes have served to shine a light on the weaknesses of our long-established and accepted work practices.

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<sup>1</sup> BIM Verantwortlicher

## **2. Focus**

This report attempts to outline the necessary steps for successful organisation wide on-boarding rooted in the reality and acceptance that innovation, change and evolution are unavoidable components for successful transition from Traditional Project Delivery to BIM. If BIM is a reality, how do we need to adapt? The development and fostering of a Growth Mindset is not solely aimed at the management level, but rather must be assumed to be part of the DNA of the practice and therefore conveyed as a core competency of all contributors. Building this ethos is the challenge. The study puts forward the key components which may facilitate this transition. Potential tools which may help to mould this outlook in the context of small to medium sized architectural practices are outlined. This attitude is independent of, and applicable to, any given project phasing. Key themes, adapted from the Growth Mindset Theory of Carol S. Dweck [1], are taken as a base for this report framework. They are;

- Effort: Tribal Leadership and Flow
- Criticism: Radical Candor, Course Correction and Feedback
- Challenges: Employee Motivation, Specialisation and Personal Growth Vector
- Obstacles: Employee Selection, Attracting Talent and Behavioural Interviewing

## **3. Painpoint/ Metrics**

The IBM is a mediator and advocate for change. A proactive approach to BIM is certainly in their interest and makes life easier. From the perspective of the office there is little sense of urgency in making any process changes. BIM Pilot Projects are rolled out, and in the best case Project Retrospectives are carried out and learnings are harvested.

Adoption is seen to be iterative, approached with caution, and carried out in a project-by-project piecemeal manner. There is little incentive to rethink established best practice. All innovation and disruption responds to a painpoint. The benefit of BIM to the construction industry is clearly defined and indisputable. The Architect must seek out their own metric by which to measure its success or failure. This study looks at the proposed changes and their impact through the prism of Employee Retention figures. It explores the positive impact on engagement, flow, personal accountability, and leadership that BIM challenges have the power to induce.

## **4. Desired Outcome**

Informed team selection, further development and recruitment is critical for success. What are the parameters by which one can assess the dynamic of a team within a BIM project? How does one position oneself to attract and retain the necessary talent? How does one identify an employee who will perceive the adoption of new skills as a motivating factor and an opportunity to evolve? How does one frame this challenge and foster upskilling within an existing workforce? Can BIM be valued as an additive element which can streamline efficiency and eliminate wasteful and repetitious activities? What are the necessary critical elements of leadership? Should it be from the top down or bi-lateral? The desired outcome of this study is to be able to articulate clearly what measures a firm should adopt in order to move with the times in respect of BIM, and also to highlight the potential positive implications on Employee Retention rate and job satisfaction in a buoyant economy.

## 5. Strategy- Workflow Toolkit

### - The Leadership component

A useful tool or model for recognising where the components of a team are at in terms of alignment with core values and assessing the overall morale in face of the challenge is the *Tribal Leadership* framework.





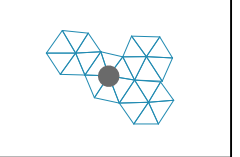
1	2	3	4 tribal leadership	5 tribal leadership
2%	25%	49%	22%	2%
despairing hostility	apathetic victim, clock in, clock out	lone warrior, personal agenda	tribal pride, vision driven	innocent wonderment, rarely sustainable
				
can't, whatever...	give up, quit	I'm great, you're not	were great, they're not, team, commit, value	team, common goal, greater good

Fig. 1 The 5 Levels of Tribal Leadership. Source: Roojoom.com

Tribes, as identified by Logan, King, and Fischer-Wright [2], are the basic building blocks and the driving force of an organization, they are collectives of people who share the same attitude and approach to work. They are broadly ranging in their levels of engagement, evolution and fulfilment. The markers of a tribe are seen as traces in their every communication, written, verbal or physical. For BIM Process implementation and associated progressive learnings the ideal level for the team to be at is Level 4, where all members are united in a vision. Great leaders understand their position as a role model and they have an understanding of human nature. They know that when you challenge the language of a tribe you can begin to challenge and upgrade its behaviour. It is up to leader evaluate and identify the disparate levels in a team and to interact with them accordingly.

### - Flow

*The best moments in our lives are not the passive, receptive, relaxing times... The best moments usually occur if a person's body or mind is stretched to its limits in a voluntary effort to accomplish something difficult and worthwhile.*  
Mihaly Csikszentmihalyi [3]

A further aspect of successful leadership is taking the time to reflect upon, evaluate and discuss an employee's skill set progressively. Employees who are put in roles which get them closer to their state of flow will be more intrinsically motivated. They will be less concerned with awarding titles and monetary promotions, or about working less hours, people can be sustained and energised by tapping into their given strengths and more importantly having them acknowledged. As Cy Wakeman puts it, wholeheartedness is the antidote to fatigue [4]. Taken to the other extreme an absence of flow can lead to fight or flight behaviour in face of challenges.

## - Radical Candor

*Radical candor is the ability to challenge directly and show you care personally at the same time [5]*

For a Growth mindset to prevail the organisation must develop a robust strategy for interaction with feedback and criticism. Poor Employee Retention is often a strong indicator of a lack of trust. In turn, mistrust builds a resistance to vulnerability within an organisation. How does one attempt to foster trust? Speak your mind, frankly and be invested enough to bother to do it. People are at their most effective when they know where they stand.

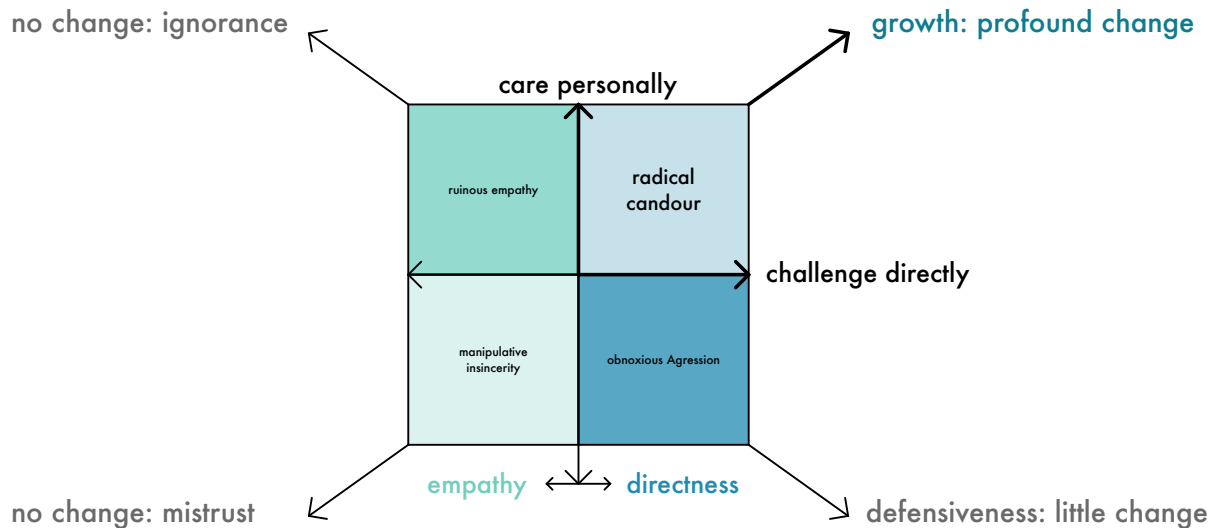


Fig. 2 Radical Candor Framework. Source: Kim Scott

## - Employee Value Equation

Growth is only possible where one is conscious or made aware of areas that need improvement. For the most part the focus in the office is on performance at any cost, meaning the emotional waste incurred is par for the course and to be anticipated. The innovation component is reserved for those who have character which is conducive to change, and doesn't pertain to other types of employees. With agility in mind, how do you make people aware of what is required of them, and to reinforce the idea that their value is not just performance but also attitude and outlook based? What format should regular feedback or check-ins be delivered in? One option would be to clearly and regularly communicate their value to the company through performance indicators, such as the Employee Value Equation framework devised by Cy Wakeman [6]. It serves to emphasise the fact that performance is not a good predictor of success, accountability is.

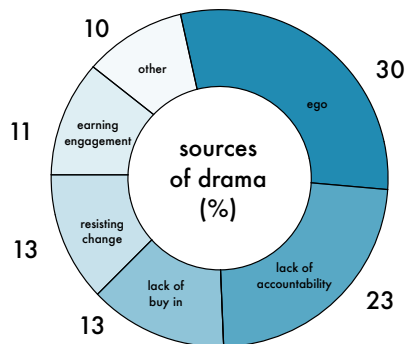


Fig. 3 Sources of Workplace Drama. Source: Cy Wakeman

## - The Celebration Grid

Devised by Jurgen Appelo [7] **The Celebration Grid** is a more complex framework by which to arrange a Project Retrospective. It has the added component of differentiating between experimental and established practices. This draws particular attention to the need to feed project planning with new ideas and to have a willingness to test in order to grow. The key message from the celebration grid is that the most learning happens via experimental trial and error. The goal is to optimise learning to streamline project efficiencies. The top half of the grid outlines what went well. Participants should be encouraged to contribute new ideas for experiments to be fed into the middle of the grid.

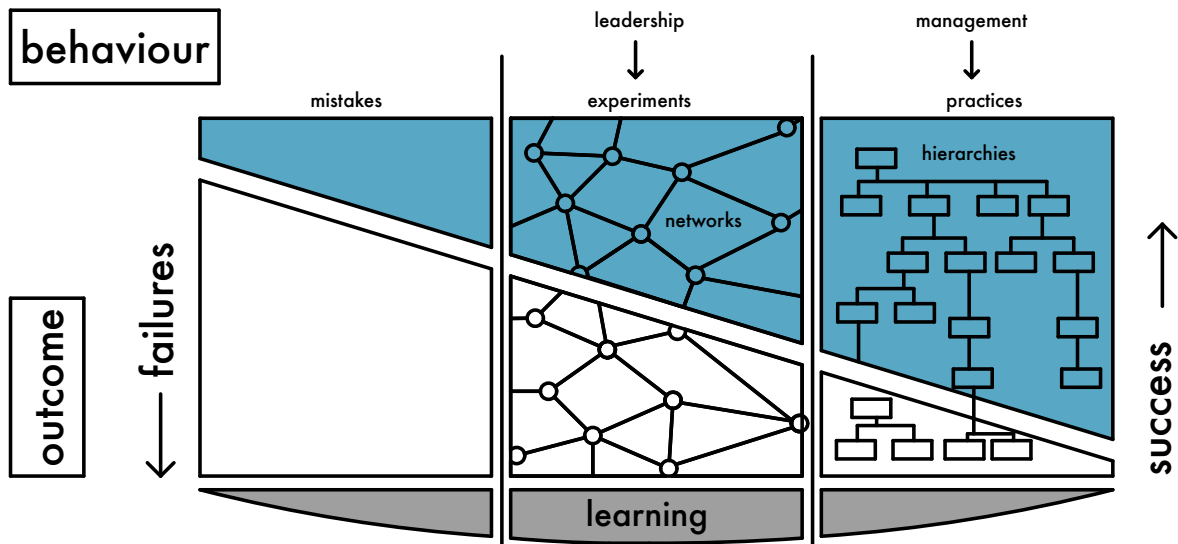


Fig. 4 The Celebration Grid. Source: Jurgen Appelo

## - One-On-Ones: Personal Growth Vectors

One-on-ones are a form of non-directional coaching, with an emphasis on insights and feedback towards an increased sense of purpose in the work, mostly coming from the employee though not exclusively. It's a solutions based exchange. It should be a safe environment in which to practice speaking up on a bigger stage, during meetings or project retrospectives.

## - Knowledge sharing channels

Key learnings should be documented and shared over an internal exchange platform. This may be filtered through a targeted Slack channel or more general. Being directional and public about learning furthers one's awareness of professional strengths and establishes a credibility in given areas. Furthermore, it increases the sense of readiness when called upon to take on new challenges. Battle fatigue occurs when people are allowed to skip regular updates. It results in a binge/purge mentality around training, innovation and learning. A more sustainable approach is committing to a form of daily check-in required to stay evergreen [6]. Such initiatives foster conversations to drive awareness and self-evolution of what's coming next, and what's currently being tested.

## - Behavioural Interviewing

Much has been made of the value of scenario based interviewing in getting a candidate to reveal their true character and mindset. This should be comprised of a structured set of questions that to reveal the candidates' past on-the-job or life learnings and experience to derive insights from their past which can assist in predicting how the candidates may deal with and approach similar situations in the future. It's a means of measuring key professional requirements such as communication, leadership and problem solving skills. Depending on the key requirements of the job, questions may be framed to address adaptability & stress management, teamwork, communication, documentation & presentation, prioritization & flexibility, decision making, problem solving, conflict management, leadership, creativity & innovation, and negotiation [8].

## 6. Conclusion

The body of the report outlines a range of tools which an organisation can use on the path to improving the learning landscape and agility within project teams. Once OKRs have been set leaders can choose to adopt one or two tools of their choice for an agreed period of time. Challenging the culture is a progressive undertaking and will take a number of years. Hosting retrospectives at agreed milestones will give leaders the opportunity to check in and see what tools appear to be having the most and what is less effective. It is not a one size fits all solution.

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