



CAPABILITY STATEMENT

DESIGN WORK IN WHICH YOU THRIVE

ViVA health at work are human-centred design strategists, facilitators, educators/trainers, and research partners. We problem-solve work, environment, and product design challenges by considering the human element.

When you want award-winning design, we're there. ViVA enables a scientific, results-driven approach to solve real-world problems.

We facilitate discovery, design, and realisation of new and improved work, products, environments, and systems. We study what people do, do, and how and why they do it. We help businesses develop work design literacy, capability, and capacity.

ViVA studies people, culture, customs, habits, activities, environments, tools, equipment, and work climate. We synthesise complex research and combine this with real-world evidence: observing and engaging people at work or play. We collaborate through design to resolve work, environment, and product challenges and create new opportunities.

We help create novel, award-winning, agile design. This allows businesses to continually address market realities and live their values, like health and sustainability.

Our approaches draw from physical, cognitive, psychological, neurological, engineering, systems, and organisational sciences to design for performance.

We consult, train, and research across a range of industries, including mining, infrastructure, energy, transportation (road, rail, and aviation), manufacturing, agriculture, retail, finance sectors, education, administration, healthcare, and architecture and design. We help improve work systems, jobs, tasks, communication, change management, training and education, products, equipment, spatial layout, procurement process, workforce strategy, engineering practice, and environments.

Our design approaches are underpinned by human factors and ergonomics: physical, neurocognitive, psychosocial, and organisational (body, mind, mood, motivation, and systems).

ViVA inspires enterprising leadership to achieve award-winning human-centered design.



OUR SERVICES INCLUDE:

Tier 1:

ViEssentials: office workstation assessments, manual task training, workplace wellbeing programs, and seminars

Tier 2:

ViChampion: Risk assessments, ergonomics programs, job analysis, product design strategy, Green Star ergonomics credit for interiors, and sensory approaches to workplace wellbeing and environmental design

Tier 3:

ViPremier: Macro-ergonomics, design strategy workshops and capability building, human systems integration strategy, human factors in complex automation, and safety-critical work design

OUR VISION

To build a sustainable future by considering humans in design.

OUR MISSION

To develop regenerative design capability in our partner organisations so that human-centred design and human systems integration are just the way that business is done.

WHO WE ARE

ViVA health at work are human-centred design strategists, facilitators, educators/trainers, and research partners. We problem-solve work, environment, and product design challenges by considering the human element.

Since 2005, we have helped businesses and designers realise opportunities, enhance usability, and construct health and wellbeing. We support a range of industries, including mining, construction, transportation, agriculture, utilities, manufacturing, distribution centres and supply chains, retail, finance, technology, healthcare, education, customer service, and architecture & design.

Our team have diverse skill sets, certifications, and doctorate-level qualifications in human factors and ergonomics, business leadership, education and training, and health and wellness.

ViVA health at work is located in Australia with headquarters in Southeast Queensland. We provide services nationally and globally.





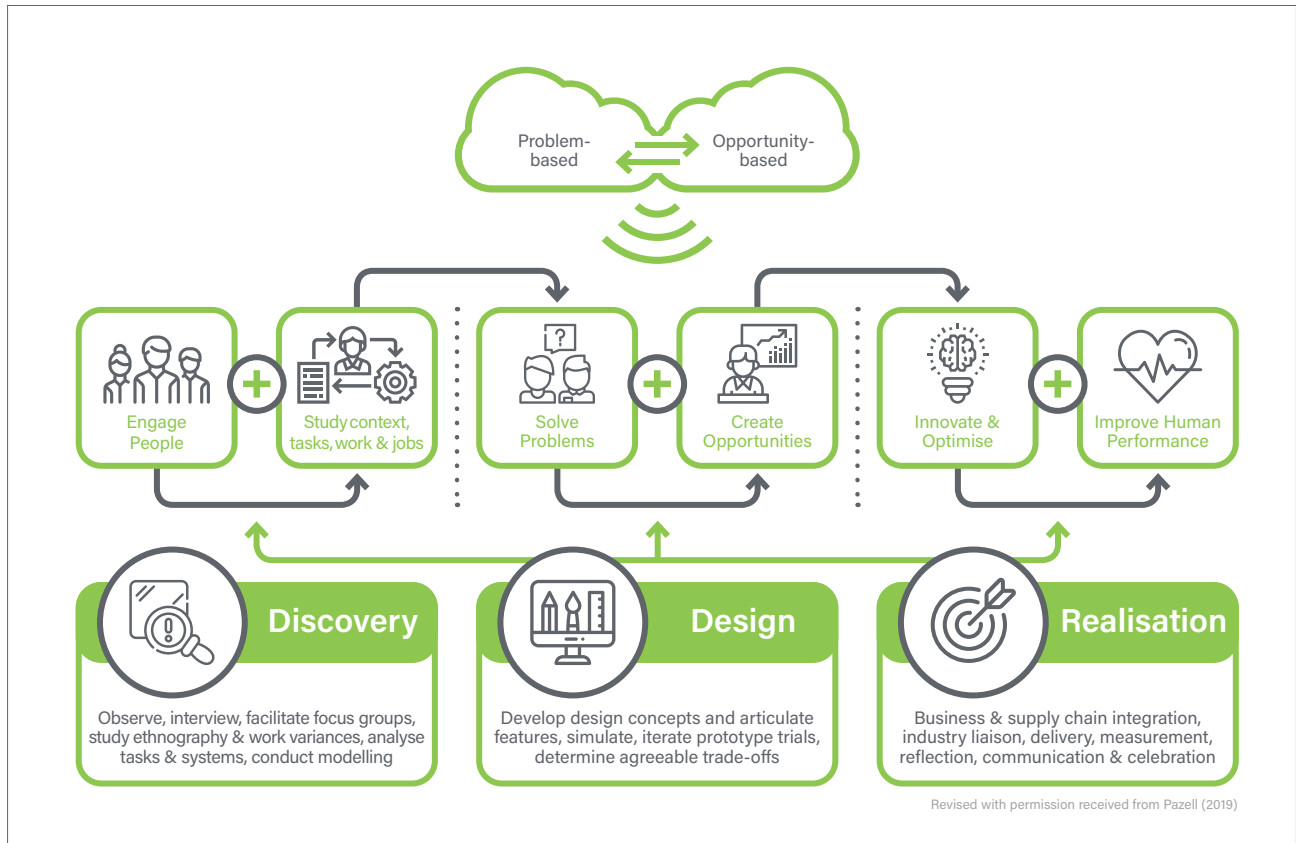
WHAT WE BELIEVE

- » A workplace is an environment and system that can and should be designed to condition a workforce (physically, cognitively, and psychosocially). Good work and job design can optimise performance throughout the employee lifecycle: from hire to retire.
- » Human-centred design, human factors engineering, and participatory ergonomics pave the way toward an emerging culture of engagement and innovation.
- » Positive, constructive, and facilitated co-design methods involve workers to become architects of meaningful, comprehensible, and manageable tasks and activities.
- » Safety, health, and productivity are not interchangeable or independent, nor is sound leadership process, they must be synergistic in work practice.
- » Positive psychology can be employed in work design to optimise performance in work systems (salutogenesis) and design for diversity.

OUR VALUES

- » Salutogenesis
- » Performance, sustainability & resilience
- » Diversity
- » Ecological & evolutionary design
- » The blend of science & practice
- » Technological Advancement
- » Innovation
- » Shared Problem Solving

OUR APPROACH



We create sustainable futures and optimise cognitive, psychosocial, and physical performance. We engage the people who know the work system or products best:

Those who use it!

We help organisations understand what “good” looks like; integrate business unit activity; and develop award-winning work, environment, training, or product solutions.



BENEFITS

- » Improve productivity, engagement, workplace climate, health, wellbeing, and safety
- » Human-centred design of equipment, tools, products, environments, tasks, jobs, and work systems
- » Empathy in design with a focus on the business objectives
- » Develop a deeper understanding of work -as done, rather than -as imagined, prescribed, or disclosed
- » Better manage and plan for safety-critical work
- » Assure a quality “fit” among job task demand, equipment, and worker
- » Improved performance and human interface with complex automation or new technologies
- » Increase worker engagement to believe in their work beyond that which is “just a job”
- » Optimise work performance throughout the employee life cycle: from hire to retire
- » Inspire workers to care about their health & wellness to remain fit-for-work, play and family activity
- » Promote sound leadership
- » Achieve regulatory compliance
- » Achieve efficiency, productivity, cost-benefit, and return on investment on work design
- » Develop regenerative design capabilities among work teams
- » Enhance business resilience, sustainability, and community goodwill

Expect an average 49.5% reduction in incidents with significantly fewer sprain strain injuries among workers, and 64.5% reduction in cost*

**In Goggins et al (2008) Journal of Safety Research, 39, 339 - 344.*



OUR SERVICES

The ViVA services address different aspects of human factors, ergonomics, human-centred design, and good work design.



COGNITIVE ERGONOMICS

I THINK, therefore I am. I FEEL, therefore I must be.

When you need good performance, we consider how people act, think, make decisions, sense, and feel. We design for better experiences.



ORGANISATIONAL ERGONOMICS

EMPATHY and PERFORMANCE.

Design work for health, quality, and performance so that these features become the reality of work. Align the way that work is done, imagined, prescribed, and disclosed.



PHYSICAL ERGONOMICS

Work as EXERCISE.

The things that we touch, what we do, where we do it, and how we move affects our health and wellbeing.



WORKPLACE WELLNESS

Be WELL. Achieve WELLBEING. Be WHOLE. Boost employee health, wellness, and engagement through collaboration, co-design, education, and custom wellbeing services.



OFFICE ERGONOMICS

Work-from-anywhere. When the OFFICE is a moving target. Better your health and performance at your workstation, assess workers pre- and post- a new office design, or decide on the management of hybrid, agile, activity-based, and work-from-anywhere styles.



ERGONOMICS TRAINING

The CAPACITY to learn is a gift, the ABILITY to learn is a skill, the MOTIVATION to learn is a choice.

Shared problem-solving is the cornerstone of adult learning and learning through design projects is fun.

"Our services are tailored to suit customer need. Every service request is unique. We will customise and provide recommendations that are evidence-based, meaningful to the business, and supported by science."

Dr Sara Pazell





Human-centred design (human factors and ergonomics) promotes productivity and health, contributes to sustainability, saves money, engages the workforce, and prevents adversity.

COST EFFECTIVENESS

Human-centred design (human factors and ergonomics) promotes productivity and health, contributes to sustainability, saves money, engages the workforce, and prevents adversity:

- » In a project commissioned by the Australian Department of Defence, a publication review showed that a systematic, life-cycle approach to human-centred design led to return on investment in the range of over 40: 1;¹
- » Participatory ergonomics and human-centred design have a positive effect on work culture,² contributes to health,^{3,4} and offers a strong return on investment;
- » Human-centred design reduces injury risks, leads to fewer operator errors, reduces training costs and user support needs, and avoids costly system failures;^{6, 7, 8}
- » Organisations, such as, The Department of Transport for New South Wales, Transport Assets Standard Authority, can require contracting engineering organisations to integrate human factors in their practices;⁹
- » Environmental comforts and well-being can be improved through sustainability initiatives provided by green ergonomics;¹⁰
- » Simply put, good ergonomics is considered good economics.¹¹

CASE STUDY

BITUMEN HEAT-IN-TRANSIT TRAILER



THE PROBLEM

The transit of bituminous products for roadworks projects can be a dangerous task with extensive drive times and challenging heating requirements. Bitumen, up to 200°C in hot or molten state, presents risks of thermal burns, fume and toxic vapour exposure, respiratory tract or eye irritation, and exposure to irritating emulsifiers. Contained bitumen, under certain conditions, may be explosive. Bitumen trailers are used routinely for asphalt roadworks projects and are retained in a business for 12 – 20 years – the inherent risks and design constraints are carried for a long time.

THE DESIGN CHALLENGE

The challenge was to reduce shift time of tanker operators (and, thus, fatigue), improve product heating and heat-retention, ensure safe transit, improve equipment interface, isolate workers, and improve efficiency, productivity, and performance.

Essentially, the goal was to find a solution to change on-site liquid petroleum gas heating methods of bituminous products to a heat-in-transit system that made sense and maintained compliance for road transit of dangerous goods in a heavily regulated industry.

DESIGN METHODS

Empirical human-centred approaches were used to study the equipment use on-site, interview workers, take measurements, determine risk of equipment operation and maintenance, and develop design concepts and strategies. Design tools were used from those developed in the mining industry with recommendations to help improve performance.

DESIGN SOLUTION

Engineering developed a new bitumen tanker to provide electrical heat-in-transit (to heat and circulate bitumen) with a diesel package burner that can be used to lift heat when on-site.

The design includes interlocking roll-over activation and impact sensors in case of collision. Analog display of operating features was replaced with digital monitors within view outside the tanker and in the cab. A rear ladder was replaced with a side ladder to isolate workers from valves and product exposure. A remote control has been designed to enable operators to monitor the receiving tank while controlling the pump.

DESIGN IMPACT

Efficiency, sustainability, quality improvement safety, competitive positioning of the organisation within the transport industry, and regulatory approvals were received to permit the operation of the new trailer

INNOVATION

This was a world-first endeavour to develop a heat-in-transit bitumen tanker, revolutionising tanker design, and the first known application of remote pump activation.

The design is new and original with ideation from Speedie Contractors; human-centred design facilitation, analysis, and reporting by ViVA health at work; and engineering design implemented by Holmwood Highgate. The project was awarded a coveted 2019 Australian Good Design Award in the engineering category.

CASE STUDY

OFFICE FIT-OUT SUPPORT



THE PROBLEM

A fit-out of an office environment requires specialised change management and agile design thinking to support the needs and capabilities of workers while conforming to the constraints of construction realities.

THE DESIGN CHALLENGE

Ensure optimum engagement and satisfaction among workers associated with their large office relocation.

METHODS

Empirical, human-centred work design approaches to observe workers, interview them, conduct routine assessments, determine needs for work performance and equipment, and make recommendations with project management, design, procurement and health and safety teams. Review international and national standards and scientific papers to advise on the most appropriate environmental design considerations for health and wellbeing (e.g., lighting, noise parameters, methods to reduce sounds of nearby intelligible speech, or active lifestyle promotion through agile work design that permits movement while at work and functioning “neighbourhoods” for functional work teams).

FINDINGS

There is a need to design for diversity if an organisation wishes to enact their inclusivity policies. This involves providing agile design to enable autonomous, customised work methods, equipment interface, or space use.

FIT-OUT STRATEGIES

- » Pre and post-occupancy education and training, assessments, and workplace accommodation
- » Video production to continue education about good workstation set-up with new equipment per the organisation's learning management system
- » Recommendations for equipment procurement
- » Recommendations for spatial layout and work systems, as well as pandemic distributed workforce management strategies
- » Training to key team members to become Certified Office Workstation Practitioners – Level 1, foundation-level assessors
- » Innovation & Impact
- » High satisfaction and engagement ratings per climate surveys post-fit-out
- » Reduced risk for injury claims and more likelihood for productive work output

CASE STUDY

EDUCATION CURRICULUM DESIGN



THE PROBLEM

Undergraduate education is competitive. User experience is important to course design because it can improve user satisfaction and learning. There are constraints to reduce teaching costs and expand student cohort sizes yet maintain quality teaching standards.

THE DESIGN CHALLENGE

Course design improvements given constraints for reduced face-to-face teaching, more technology-enhanced online learning, and yet achieve practical skills-based competency to prepare students for real-world clinical service delivery.

METHODS

Action research methodology was used in our practice-oriented case study about the application of human-factors methods to re-design an undergraduate second year occupational therapy course. A cognitive task analysis provided an empirical method to develop this framework. A mixed-method quality improvement process was undertaken. This was influenced by grounded theory to consider the experiences of the students and teaching staff. The methods included past curriculum review; cognitive task analysis; and seeking feedback from subject matter experts, including a student focus group.

FINDINGS

Six student roles were identified for this course: a generalist student, a mock client, a mock therapist, an evaluator of standardised

assessment tools, a clinical documenter, and a case conference presenter. The student roles were detailed per nine cognitive components: knowledge, skills, abilities, tactics, decision-making, situation awareness, heuristics, interpersonal skills, and intrapersonal skills. Ninety-one elements that could influence performance were identified by this dissection.

COURSE RE-DESIGN

Fewer online quizzes, integrated case-based learning that was nested through different clinical presentations and topics for students to consolidate learning, case conference tag-team simulations to enhance engagement, and technology enhancement to create reliable simulated environments for student learning.

INNOVATION & IMPACT

- » Better recognition of the soft-skills required to advance as a clinical practitioner and to be effective as a student-learner.
- » Introduction of simulation and visualisation with virtual reality to add to high-fidelity technology-enhanced learning strategies
- » Recognition of professional roles to drive education streams
- » A focus on the student experience, role expectations, and more effective instructional aids and teaching and assessment practices

Pazell, S. & Hamilton, A. (2020): A student-centred approach to undergraduate course design in occupational therapy, Higher Education Research & Development, DOI: 10.1080/07294360.2020.1818697

INDUSTRIES WE SPECIALISE IN

Mining & Minerals Industries, Civil & Road Construction, Manufacturing, Commercial Engineering, Retail, Logistics & Transport, Rail, Aviation, Military, Environment & Resource Management, Finance & Accounting, Legal, Banking, Insurance, Architecture & Design, Office Interiors, Call Centres, Control Rooms – Heavy Industry, Entertainment, Retail, Health, Disability, & Social Welfare, Marketing & Communications, Tourism & Recreation, and Government & Non-Government Organisations.

OUR PROJECT PARTNERS

We partner with small, medium, and large organisations to advance good work and develop human-centred approaches to job and work design. Work improvements have been developed with several clients over the years. Here are a few of our recent project partners:



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The ViVA Business includes a diverse service palette to solve design problems and realise human-centred opportunities:

- » ViMind
- » ViOffice
- » ViWell
- » ViBody
- » ViWork
- » ViLearn

Design work in which you thrive