



CAPABILITY STATEMENT

DESIGN WORK IN WHICH YOU THRIVE

We are a human-centred design consultancy and training service working across a range of industries including mining, construction, transportation, agriculture, manufacturing, retail, finance, and education sectors.

ViVA helps you showcase enterprising leadership that can achieve award-winning human-centred work and job design. We help organisations build good work design literacy, capability, and capacity. We are concerned with the design of work for productivity and wellbeing.

We are human-centred work design strategists and, through the analysis of tasks and development of design concepts, we advise structural designers (e.g., project managers, engineers, architects, interior or industrial designers) and organisational managers (e.g., safety, operations, workforce strategy, quality improvement, health and wellbeing, or procurement) about optimal design of work, jobs, or products.

We also offer consultancy and training service, working across a range of industries, including mining, construction, transportation (road,

rail, and air), agriculture, manufacturing, retail, banking, insurance, education, health care, call centres, and architecture and design sectors. We help improve work systems, job role design, communication and training methods, products, equipment design, spatial layouts, procurement specifications, and environmental design.

Our human-centred approaches are underpinned by human factors and ergonomics: physical, neurocognitive, psychosocial, and organisational (“mind, body, and work”). Our concern is the welfare of your business, people, and culture. We want to see you exist in a workplace that is better than good; it is enviable and desirable – where greatness begets excellence – achieved through good work design.

ViVA! health at work operates in Australasia (Australia, New Zealand, and Southeast Asia).

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



OUR VISION

To inspire human-centered work and job design that creates health, productivity, and sustainability.

OUR SERVICES INCLUDE:

- » Human centred design with human factors, and ergonomics design analysis and methods
- » Work-related risk assessment and design strategy
- » Organisational systems review
- » Physical and cognitive ergonomics with organisational and environmental review in industrial and office settings: job and task analysis to inform design discovery
- » Equipment review to inform design improvement or procurement specifications
- » Training - leadership, safety, health, and wellness
- » Office ergonomics: pre-occupancy, post-occupancy, and ViOffice Workstation
- Practitioner Foundation Level 1 certification program delivery
- » Green Star Interiors - ergonomics credit
- » Webinar education: e.g. Design for (neuro) Diversity, Sedentary Behaviours and Activity-Based Work Design, Positive Thinking and Resilience in the Workplace, Distributed Workforce Management (pros and cons), Manual Task Risk Management and Principles of Physical Conditioning, Jessie - ViOffice interactive, animated office-based case study education

WHO WE ARE

ViVA! health at work have operated in South East Queensland since 2005 as a specialised project consultancy service and provide a team of advisors and trainers in ergonomics, human factors, and health and wellness.

Our team have diverse skill sets, certifications, and doctorate-level qualifications in human factors and ergonomics, business leadership, workplace training and assessment, organisational science, curriculum design, and health and wellness. We are devoted to the welfare of our client's business, people, and culture.

We service Australia, New Zealand and South-East Asia with our headquarters in South East Queensland, Australia.

OUR MISSION

To partner with our clients to determine the most effective means to achieve productivity, sustainability, safety, health, and wellness. We are interested in helping an organisation transform and enhance their performance capability. The value proposition of our services results in a legacy of good work and job design.





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

We value human-centred approaches to work and job design, where peak conditioning, continual learning, and shared problem solving are ongoing strategies.

OUR APPROACH

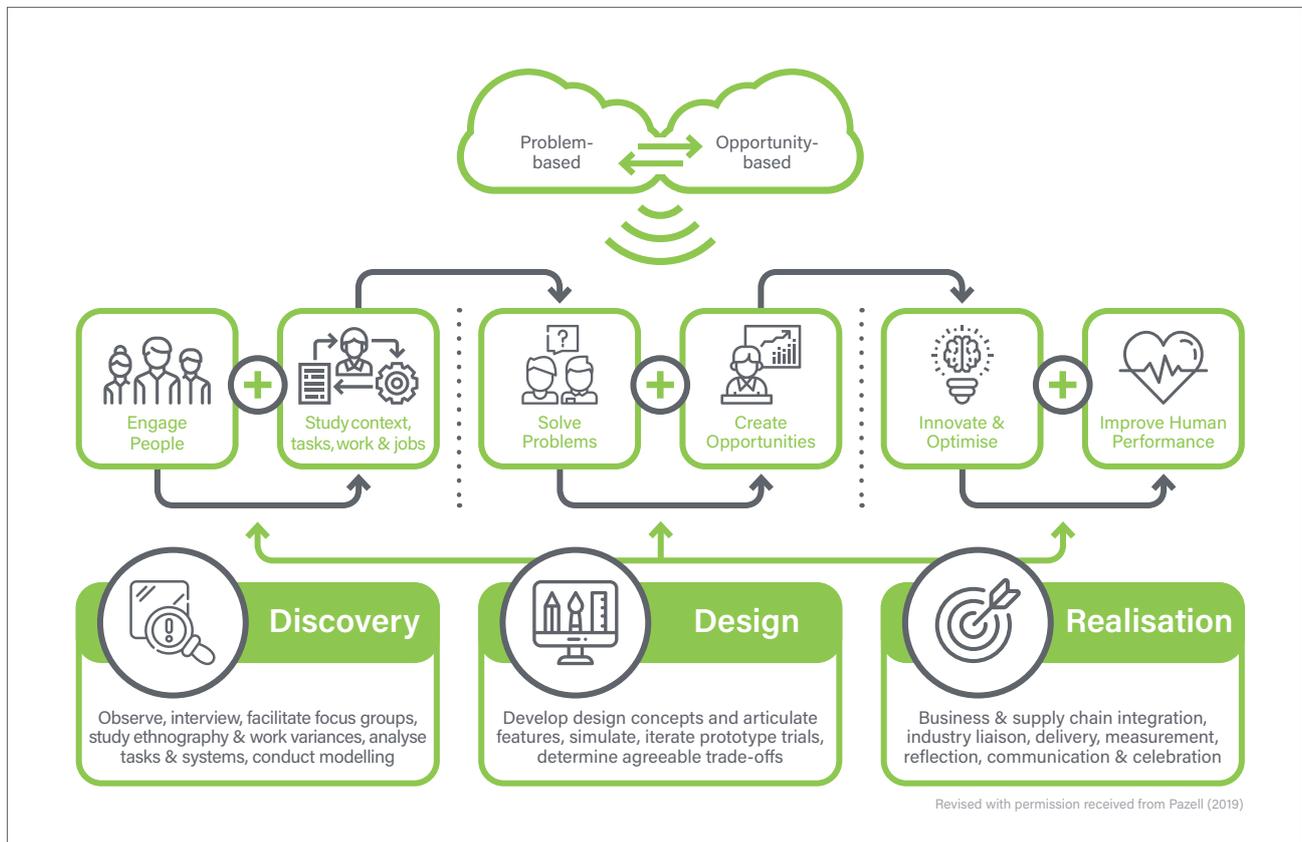


Figure 1: A human-centred design process

We advance competitive positioning in an organisation and create opportunities for optimum cognitive and physical performance through the design of the environment, systems, work activities, tasks, tools, products, and equipment that support those who matter the most: the people who use and maintain them!

We help organisations evaluate task performance with participation among subject matter experts; find the opportunities for

work, product, or training re/design; identify hazards, analyse and determine risk; leverage opportunities, develop design concepts and features; test these concepts and manage an iterative design practice; establish leading indicators; 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 through human-centred design of equipment, tools, environments, and work systems
- » Compassionate approach to work analysis that helps develop leaders in the field
- » Develop a deeper understanding of work -as done, rather than -as imagined, prescribed, or disclosed
- » Assure a quality "fit" among job task demand, equipment, and worker
- » 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
- » 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 SUB-BRANDS

The ViVA Business includes many Sub-Brands that address different aspects of human factors, ergonomics, human-centred design, and good work design.



ViMind considers how people perceive their sensory world, interpret these perceptions, and make decisions that drive action: cognitive, neuroscience, and psychosocial systems to boost engagement.



ViOffice addresses essential workplace factors including design, training, equipment, workstation layout, lighting, and acoustics to manage workstation wellness and employee performance. Recommendations can be made for fit-outs, work teams, or individuals.



ViBody evaluates the physical demands on employees to reduce risk factors, provide early intervention, and offer strategies to improve health.



ViWork applies human-centred approaches to design work and jobs so that the way work is done, imagined, prescribed, and disclosed are well-aligned and in concert with company strategy.



ViWell provides evidence-based strategies to boost employee health, wellness, and engagement through assessment, collaboration, co-design and education. Improve productivity, create a culture of fun, build resilience, and prevent burn out, by addressing sedentary work, fatigue, physical fitness, mental agility, and positive thinking.



From vehicles to workstations, ViOffice and ViWork Design practitioners can advise on ergonomics and work design, and we provide this training.

ViLearn also provides custom-made in-house webinars, online interactive training, and guest speakers for public events.

"Our services are designed to be tailored to suit customer need. Every service request is unique, just as people need to express their individuality; we will customise and provide recommendations that are evidence-based and supported by human-performance 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: 1¹;
- » Participatory ergonomics and human-centred design have a positive effect on work culture², 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 practices⁹;
- » Environmental comforts and well-being can be improved through sustainability initiatives provided by green ergonomics¹⁰;
- » Simply put, good ergonomics is considered good economics¹¹.

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

We are a human-centred design consultancy and training service working across a range of industries including mining, construction, transportation, agriculture, manufacturing, retail, finance, and education sectors.

We work with organisations of all sizes to optimise their work design literacy, capability, and capacity through improved work systems, job design, communication & training methods, products & equipment, spatial layouts, equipment, and environmental design. Our customised work solutions can include pre- and post-occupancy fit outs, design review, control room ergonomics, neurological sensory profile assessments, and safety in design.

The ViVA Business includes many Sub-Brands that address different aspects of environmental design, workplace ergonomics, employee performance, physical and mental wellbeing, risk assessment, training and education.

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

Design work in which you thrive