

Collaboration readiness levels

STAGES/DIMENSIONS	CONSIDERING	NETWORKING	COOPERATING	ENGAGING	PARTNERING
Definition	Acknowledge the need to collaborate for innovation purposes	Identify external agents for innovation collaboration through network activities	Engage and interact with external agents to commence collaboration for innovation	Purposeful collaboration with external agents to innovate	Recurrent collaboration for innovation through partnering agreements
Types of activities	No active interaction or exchange. The self-realisation or external recognition of an emerging need.	Informal, initial conversations and exchanges, such as placements or industry guest lectures. Typically, a one-off approach.	The emergence of more tangible cooperation objectives, but focusing on discrete, specific, ad hoc initiatives of minor ambition, such as individual research student placements or third-party research. It remains embryonic and lacks systematisation.	Emergence and implementation of cooperation mechanisms on larger-scale (R&D) initiatives, such as contract research activities and cooperative research projects. Remains transactional but in the scale-up phase.	A transformative approach to research partnerships, including joint innovation labs, co-creation of knowledge or co-patenting. Strategic intent to cooperate. Long-term commitment. The systematisation of research cooperation for innovation.
Three dimensions of the CRI					
Organisational ethos and culture					
a. Consistent goals	• Shared goals are primarily focused on internal teamwork.	• Shared goals cover ad hoc and informal networking with URIs.	• Shared goals cover tangible cooperation with URIs for innovation.	• Shared goals cover purposeful collaboration with URIs for innovation.	• Shared goals cover strategic partnership with URIs for innovation.
b. Shared knowledge	• Knowledge sharing among team members is internal.	• Knowledge sharing with URIs in informal settings.	• Knowledge sharing with URIs in formal settings but remain ad hoc.	• Knowledge sharing with URIs in purposeful collaboration initiatives.	• Knowledge sharing among URIs trustfully and on an ongoing basis.
c. Transparent communication	• Innovation activities, if present are inward-focused.	• Innovation activities occasionally come from informal conversations with URIs and are mainly short-term-focused.	• Innovation activities often come from formal cooperation with URIs and are mainly short-term-focused.	• Innovation activities often come from purposeful collaboration with URIs and are mainly long-term focused but transactional.	• Innovation activities very often come from long-term partnerships with URIs .
d. Long-term orientation					
e. Innovation orientation					
Capabilities and resources for collaborations					
a. Resources	• Resources are in place only to support internal collaboration.	• Resources are in place to support ad hoc and informal conversations with URIs.	• Resources are in place to support tangible cooperation with URIs but focus on discrete, specific, ad hoc initiatives.	• Resources are in place to support purposeful engagement with URIs on larger-scale initiatives.	• Resources are always in place to systematically support strategic and recurrent collaboration with URIs for innovation.
b. Easy assimilation of new knowledge	• Employees are equipped with capabilities of assimilating new knowledge from and working with internal team members.	• Employees are equipped with capabilities of assimilating new knowledge from and networking with URIs in informal settings.	• Employees are equipped with capabilities of assimilating new knowledge from and cooperating with URIs in formal settings for innovation.	• Employees are equipped with capabilities of assimilating new knowledge from and engaging with URIs on larger-scale initiatives for innovation.	• Employees are equipped with excellent capabilities of assimilating new knowledge from and partnering with URIs strategically and systematically for recurring collaboration and research cooperation .
c. Complementary competence					
d. Co-creation support					

STAGES/DIMENSIONS	CONSIDERING	NETWORKING	COOPERATING	ENGAGING	PARTNERING
Receptiveness to working with URIs a. Mutual trust b. Openness c. Leadership support d. Appropriate timelines e. Fair rewards f. Commitment towards collaboration g. Resources and capabilities for collaboration	<ul style="list-style-type: none"> Trust is largely built among internal team members. Collaboration is mainly with internal stakeholders. Open to ideas from employees. Leadership supports collaboration between team members. Successful outcomes are from internal collaboration. Systems and processes, if present, are mainly for internal collaboration. 	<ul style="list-style-type: none"> Trust towards URIs for informal and ad hoc conversations. Informal, initial and ad hoc conversations and exchanges with URIs, e.g., industry guest lecture. Open to ideas from other domains through informal conversations with URIs. Leadership supports one-off networking with URIs. Successful outcomes are from informal networking with URIs. Systems and processes are in place for informal networking with URIs. 	<ul style="list-style-type: none"> Trust towards URIs for formal collaboration. Emergence of more tangible cooperation objectives with URIs. Open to ideas from other domains through formal collaboration with URIs. Leadership supports discrete and specific interactions with URIs with minor ambition, e.g., individual student placement. Successful outcomes are from an informal collaboration with URIs. Systems and processes are in place for formal collaboration with URIs. 	<ul style="list-style-type: none"> Trust towards URIs for purposeful engagement. Emergence and implementation of cooperation mechanisms on larger-scale initiatives with URIs. Proactively look for ideas from other domains through purposeful engagement with URIs. Leadership supports purposeful collaborations with URIs, e.g., contract research activities, cooperative research projects. Successful outcomes are from purposeful engagement with URIs. Systems and processes are in place for purposeful collaboration with URIs. 	<ul style="list-style-type: none"> Excellent trust towards URIs for strategic partnership. Transformative approach to research partnerships with URIs. Proactively look for ideas from other domains through a strategic partnership with URIs. Leadership always support recurrent and strategic collaborations with URIs, including joint innovation labs, joint ventures, and co-patenting. Successful outcomes are from strategic partnership with URIs. Systems and processes are in place for strategic partnership with URIs.

Five areas to work on to move up the readiness scale

Leadership capabilities	<ul style="list-style-type: none"> Leaders may support internal teamwork and collaboration within the supply chain but are interested in broadening it to include URIs. Triggered by an identified need, leaders consider putting resources towards engagement. Leaders are interested in starting conversations with URIs. 	<ul style="list-style-type: none"> Leaders tangibly support networking with URIs by highlighting the benefits and opportunities of networking with URIs. Leaders are willing to put resources towards initial networking activities to explore opportunities. Informal conversations and exchanges between executives and URIs occur. 	<ul style="list-style-type: none"> Leaders are committed to advancing potential collaboration opportunities with URIs with tangible objectives. Leaders are willing to put resources towards tangible cooperation with URIs to ensure successful outcomes. An executive-level champion/sponsor supports specific initiatives such as hosting academics in their organisations or sending their staff for stints in a research environment. 	<ul style="list-style-type: none"> Leaders are strongly committed to supporting and purposefully initiating large-scale projects with URIs for innovation. Leaders are committed to putting resources to ensure successful initiation and implementation of large-scale engagement with URIs. Executive-level champions are equipped with authority and capability to purposefully and actively seek opportunities for engagement with URIs through initiatives such as contract research activities, and cooperative research projects. 	<ul style="list-style-type: none"> Leaders are strongly committed to successful innovation and long-term performance outcomes from recurring and strategic partnerships with URIs. Leadership is fully committed to systematically putting resources towards these partnership activities with URIs. Executive-level champions are embedded in the URI's innovation ecosystem. They are inside organisations to systematically provide resources for recurrent and strategic partnership through initiatives, e.g. joint innovation labs, knowledge co-creation or co-patenting.
--------------------------------	--	--	---	---	---

STAGES/DIMENSIONS	CONSIDERING	NETWORKING	COOPERATING	ENGAGING	PARTNERING
Business resources and capabilities	<ul style="list-style-type: none"> Resources and capabilities are mainly for teamwork in organisations and collaboration within the supply chain. Organisations gather information about necessary resources and capabilities for initial conversations with URIs. 	<ul style="list-style-type: none"> Resources and capabilities dedicated to networking with URIs are in place, e.g., connect with SME Connect facilitators to understand collaboration mechanisms. Organisations provide staff training about effective networking with URIs Funding is in place to support initial, informal, and ad hoc conversations and exchanges with URIs, e.g., industry guest lecture. 	<ul style="list-style-type: none"> Resources and capabilities dedicated to collaborating with URIs are in place, e.g., individual research student placements or third-party research contracts. Organisations provide staff training about effective collaboration with URIs Funding and project management are in place to support tangible cooperation initiatives with URIs so that administrative requirements are met. 	<ul style="list-style-type: none"> Resources and capabilities dedicated to engaging and purposeful collaborating with URIs are in place, e.g., contract research activities. Organisations provide staff training about effective engagement with URIs They implement and constantly improve the project management needed for cooperative research projects and evaluate and fill any resource/capability gaps as the project starts. 	<ul style="list-style-type: none"> Resources and capabilities are in place in a transformative and systematic manner to support recurring and long-term partnerships with URIs. Organisations provide staff training about effective partnering with URIs Organisations regularly invite experienced collaboration champions to share knowledge of success and lessons learnt Funding and administrative support are in place, and resources are orchestrated across organisational departments for successful partnerships with URIs.
Knowledge sharing	<ul style="list-style-type: none"> A need to draw on external knowledge is identified. Knowledge sharing mainly happen inside organisations among staff. Organisations recognise the benefits of and are interested in developing resources to support knowledge sharing with URIs. 	<ul style="list-style-type: none"> Staff are exposed to external knowledge during networking events with URIs. Knowledge sharing mainly comes from URIs to staff about collaboration channels and mechanisms. Organisations support initial knowledge sharing by promoting the participation of informal conversations with URIs and exploration of local research and innovation ecosystem by, for example, attending university-led workshops, seminars, and events, and connecting with facilitators at URIs. 	<ul style="list-style-type: none"> Staff are open to ideas from other knowledge domains, understand the benefits, and trust fair rewards of knowledge sharing with URIs. The willingness to share internal knowledge with researchers develops alongside the ability to understand and incorporate external knowledge into products/processes. Organisations develop beyond surface-level relationships with URIs, e.g., participating in innovation contests and hackathons, to support trustful knowledge sharing. 	<ul style="list-style-type: none"> Staff trust URIs for large-scale projects and are encouraged to share innovation knowledge to attract URIs for collaborative development. Training for effective knowledge sharing and absorptive capabilities is provided regularly for staff to ensure they can effectively absorb and utilise new knowledge from URIs. Organisations progressively nurture deep relationships through multiple forms of cooperation, ranging from hosting university interns or PhD candidates to conducting joint research projects to enhance knowledge sharing. 	<ul style="list-style-type: none"> Staff understand the benefits of knowledge sharing and are strongly committed to proactively sharing and absorbing knowledge during a partnership with URIs for innovation and mutual benefits. Staff can successfully connect existing knowledge with new insights from URIs, and proactively search for new opportunities for recurring collaborations. Organisations work towards the systematic build-up of social capital and trust at both individual and organisational levels to enhance recurring knowledge sharing with URIs.

STAGES/DIMENSIONS	CONSIDERING	NETWORKING	COOPERATING	ENGAGING	PARTNERING
Systems and processes	<ul style="list-style-type: none"> Systems and processes are mainly in place to support internal collaborations. Organisations are interested in designing the systems and processes that will be needed for URI collaborations. 	<ul style="list-style-type: none"> Organisations have routine processes in place for informal networking with URIs, e.g., processes to identify events, apply for funding, to end, and report learning from participation. Organisations start to develop an understanding of the role of different types of partners for systems and processes needed for collaborating with URIs. 	<ul style="list-style-type: none"> Organisations have routine processes in place for cooperating with URIs, e.g., processes of preparation, initiation, implementation, and evaluation of initiatives such as research contracts and student placements. Organisations put systems in place to ensure the successful execution of collaborative agreements in a timely manner and that the executive-level champion/ sponsor can manage and deliver projects effectively. 	<ul style="list-style-type: none"> Organisations have routine processes for engaging with URIs in purposeful and large-scale initiatives, including processes of preparation, initiation, implementation, and evaluation, and regularly improve and adapt project management and other organisational systems and process. Organisations can manage projects in a timely manner, design monitoring systems, and tap into different funding mechanisms and tax incentives. 	<ul style="list-style-type: none"> Organisations take a transformative approach in redesigning systems and processes to nurture deep relationships with URIs beyond one-off and transactional initiatives. Organisations use developed contract and project templates for recurring projects with regular improvement, and executive-level champions become embedded in the university innovation ecosystem and are alert to new opportunities.
Outcomes	<ul style="list-style-type: none"> Shared outcome KPIs are mainly in place for internal collaborations. Organisations start to believe in fair reward and mutual benefits when collaborating with URIs and are interested in designing performance outcomes to kick start initial conversations with URIs. 	<ul style="list-style-type: none"> Organisations understand mutual capabilities and develop a shared understanding of successful outcomes during networking with URIs. Organisations develop shared KPIs to ensure successful outcomes from networking with URIs. 	<ul style="list-style-type: none"> Organisations develop mutual commitment across the business for collaboration with URIs and ensure fair rewards from collaborative projects. Organisations identify concrete and tangible outputs which align with strategic innovation objectives and overall business goals. 	<ul style="list-style-type: none"> Organisations formalise cooperation agreements and highlight concrete outcomes of collaboration with URIs, ensure shared KPIs are in place and outcomes are well understood. Organisations learn from previous collaborations that have benefited parties and form the basis of future arrangements. 	<ul style="list-style-type: none"> Organisations have developed a substantial record of successful collaborations with URIs that reward fairly and generate mutual benefits. Organisations systematically reflect on the outcomes of engaging experiences, emphasise the benefits of a long-term partnership, redesign objectives and goals to support recurring and strategic collaborations, and ensure parties involved in the future are recognised and rewarded.