TECHNICAL SPECIFICATION

ISO/TS 44006

First edition
2023-10

Collaborative business relationship management — Guidelines for university-business collaboration

Management collaboratif des relations d'affaires — Lignes directrices relatives à la collaboration université-entreprise

Reference number
ISO/TS 44006:2023(E)

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Published in Switzerland

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Foreword

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This document was prepared by Technical Committee ISO/TC 286, *Collaborative business relationship management*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

With the rapid development of economic globalization, international exchanges and collaboration in education are also developing constantly. Good practices of university-business collaboration (UBC) have been formed in many other countries. This document provides guidance on the development of a sustainable UBC.

The participation of multinational business partners in UBC is becoming more common. However, there are significant differences between UBCs across different countries, and establishing a common standard for UBC will provide guidance to the varying UBC practices. Through this, different interested parties to the internationalization of UBC can clearly understand expectations, realize in-depth exchanges and collaboration in international human capital and science and technology innovation, encourage business partners to explore international markets, and promote global industrial transformation and economic development.

This document will stimulate the innovation and development of business partners, especially small and medium-sized business partners and universities, cultivate applied and innovative talents through the advantages of UBC, and improve the level of social innovation and the quality of talent employment.

Collaborative business relationship management — Guidelines for university-business collaboration

1 Scope

This document gives guidance for universities, business partners and other interested parties on using the 12 principles of collaborative business relationships provided in ISO/TR 44000 to improve their capability in university-business collaboration (UBC).

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
university-business collaboration
UBC
collaboration between a university and its *business partners* (3.2), in order to achieve innovation, knowledge development, capacity building, workforce development, employment promotion and other collaborative opportunities

Note 1 to entry: The term “university” in this document refers to an institution of higher (or tertiary) education which awards academic degrees in several academic disciplines or offers vocational education, including but not limited to research-oriented university, applied university, business school, art school, college, polytechnic, higher vocational and technical university (college), and community university (college).

3.2
business partner
organization that can affect, be affected by, or perceive itself to be affected by the realization of the goal of university and business

3.3
relationship management
series of management activities, such as systems, methods, consultation mechanism and evaluations, which are carried out to achieve the collaborative relationship expected by a university, its *business partners* (3.2) and their interested parties

4 Structure of this document

This document is based on the 12 principles of collaborative business relationship given in ISO/TR 44000. For each principle there are the following three main subclauses:

— what: a summary of the intent of the principle;

— why: an explanation of its relevance to university and business;

— how: guidance on its implementation.

5 Implementation of the principles of university and business relationships management

5.1 Relationship management

5.1.1 What: Summary of the intent

Relationship management is essential to sustaining collaborative relationships that are ethical and socially responsible, and that underpin success. This does not have to be a complex process but should be one which can be easily understood and communicated across the university, business and UBC interested parties.

5.1.2 Why: Explanation of the relevance

Academia and business communities often operate very differently and can therefore have a varying focus on outcomes. The UBC should have a joint focus on agreeing and effectively managing the relationship, which can be supported by identifying and documenting a common process of engagement. A collaborative working relationship management approach helps ensure consistent operation and continual improvement due to the changes over time and in personnel. In addition, relevant personnel can clarify the management mode of UBC and the expectations of interested party through a structured and documented engagement model. It is possible to develop these relationships into a broader, interdisciplinary and lasting relationship.

5.1.3 How: Implementation guidance

5.1.3.1 Establishment of the relationship management plan (RMP)

The university and its business partners can consider establishing a system of identifying and evaluating interested parties and various relationships in the UBC, clarifying the contents and methods of relationship management, and coordinating the relationship among the members of the project.

The university and its business partners should develop a joint RMP to clarify the objectives of the UBC and its environment, and the external and internal factors of achieving their objectives. It also includes the partners, collaboration environment and interested party expectations.

The formulation of a joint RMP can be an iterative and continual optimization process.

5.1.3.2 Identifying relationships

It is important to assess the collaborative relationship and determine the mode of collaboration in all stages of the UBC, including current, future and possible collaboration.

Best practice alliance benchmarking is a continual improvement process utilized to continually seek improvement to practices. When developing relationships, both the university and its business partners should understand their individual and joint advantages from collaborative work, define where they will have sustainable relationships, and define what methods can promote the sustainable development of the UBC.

The existing or potential collaborative relationships can have different outcomes at different periods of the UBC. The university should prioritize and distinguish various types of relationships and consider where a collaborative approach can deliver maximum benefit.

5.1.3.3 Establishing organization and leadership

The UBC should establish a joint management team, including the leadership team, to clearly identify the senior administrative personnel or its designated representatives responsible for the UBC, and identify the members, their roles, responsibilities and powers.

The joint management team should build an environment to support the implementation of the UBC, including but not limited to resources, equipment, property, personnel and risk management.

The joint management team should ensure continual management and upgrading of the UBC in accordance with the objectives and governance requirements.

The joint management team can develop collaborative partners according to project needs, and establish and implement the joint RMP, so that all partners can benefit from it.

5.2 Visions and values

5.2.1 What: Summary of the intent

The visions and values of a UBC should reflect the alignment objectives and concepts of collaborative work, avoid moral or ethical clashes, and articulate the future direction, culture and values required to effectively work with business partners.

5.2.2 Why: Explanation of the relevance

Visions and values provide guidance for universities, business partners and their interested parties in order to align the direction of any development, culture, reputation, ethics and behaviour. The consistent expression of the visions and values will help collaborators and interested parties in optimizing collaborative outcomes.

5.2.3 How: Implementation guidance

5.2.3.1 Identifying the visions and values of collaboration

There are important factors that affect the development of collaborative work and the success of the UBC, including the anticipation of visions and values and the profiles of relevant parties, and potential compatibility between the university and its business partners. All interested parties to the UBC should have a clear and consistent understanding of their visions and values, and maintain a clear focus on value creation.

5.2.3.2 Implementing the visions and values of collaboration

UBC management should implement the visions and values of the university and its business partners throughout the process of collaboration. Common goals and clear responsibilities should be established for the university and its business partners. The university and its business partners should focus on internal and external objectives, which include:

— strengthening the research quality and education capacity of the university;

— strengthening institutional collaboration between university researchers and potential users of research in government, industry and communities;

— mobilizing resources for research from funding bodies while adhering to ethics guidelines;

— protecting the intellectual property rights of interested parties.

5.3 UBC objectives

5.3.1 What: Summary of the intent

The objectives of the university and its business partners can be achieved through collaborative work and is established by identifying the driving factors. The interested parties of the UBC should agree on the objectives and express them in their RMP. Interested parties should carry out their responsibilities and provide adequate resources to realize the objectives. They should also consider key elements and value embodiment of the UBC, so that they can address the differences in thoughts or behaviour that can arise in the process of collaboration.

5.3.2 Why: Explanation of the relevance

Collaboration and exchange between universities and business partners is one of the important channels for industry development and curriculum design, talent cultivation and resource mobility, and also promotes innovation in society. The effectiveness and feasibility of the objectives are the basis for restructuring any limited resources, enhancing competitive advantage, and realizing the value for the university, its business partners and UBC interested parties. Clarity of the objectives is the basis for effective collaboration and provides guidance on the implementation of activities, key points, development direction and behaviour for all parties. A clear statement of the objectives of collaboration directly contributes to the consistency of the actions and conduct of all parties.

5.3.3 How: Implementation guidance

5.3.3.1 Establishing objectives

All parties should have a clear and consistent understanding of their objectives and should consider the value of participating in the collaborative arrangement.

In the process of collaborative working involving all interested parties, each party should define its own objectives, understand the other party's objectives and find the common objectives of all parties.

This is necessary to ensure compatibility between a party's own objectives and the common objectives, achieve effective participation of all parties, and maintain mutual benefit between and among the parties.

5.3.3.2 Coordinating preparation

All parties should clarify the objectives and values of collaboration in advance, integrate resources and establish effective collaboration mechanisms. Defining the objectives ensures that the collaborative approach can be carried out better in order to improve the efficiency of the relationship and reduce the negative impact of external conditions on the partnership.

5.3.3.3 Coordinating preparation

Consideration should be given to the individual risks of collaboration for each party. The joint risks should be considered in a holistic manner.

5.3.3.4 Refining objectives

All parties should clarify the development direction of the objectives, and consider the setting of milestones.

All parties can set small, phased objectives according to the time limitation. The objectives can be divided into short-term, medium-term and long-term objectives.

All parties may set clear objectives for each sub-item according to the various contents of the collaboration.

5.3.3.5 Implementing objectives

All parties should formulate clear action plans according to the collaboration objectives.

In the process of implementing a collaborative venture, all parties should effectively communicate and implement the established objectives.

The formulation of the action plans should fully assess the actual capabilities and influencing factors of all parties to ensure that the plans are able to be executed, quantified and assessed.

During the implementation process, the execution should be checked and monitored according to the objectives, and all the relevant information should be summarized in a timely manner.

5.3.3.6 Adjusting objectives

In the process of achieving the objectives, the corresponding clear revision mechanism should be established.

The revision mechanism should clearly define the conditions for the revision, the criteria for revising the initiator, the revision process and the revision itself.

5.4 Collaborative leadership

5.4.1 What: Summary of the intent

The appointment of several senior leaders who are in charge of managing the relationship between the university and its business partners is key to the success of the UBC. The senior leaders of the UBC are jointly appointed, representing all the parties. They are fully empowered and supported, effectively supporting and guiding the UBC, and creating an environment conducive for collaboration.

NOTE The title of the senior leaders of the UBC can be UBC Project Manager or UBC Manager.

5.4.2 Why: Explanation of the relevance

Senior leaders make a clear commitment to the relationship between the university and its business partners. They set an example and work hard to achieve common visions, which are very important in establishing and strengthening the relationship between the university and its business partners. The participation of senior leaders provides direction, focus and trust for all parties directly involved in the UBC, which in turn sets the tone and behaviour in all levels of the UBC. This promotes collaborative behaviour and ensures the success and sustainable development of relationships and project outcomes.

5.4.3 How: Implementation guidance

5.4.3.1 Appointing senior leaders for UBC

All parties in the UBC should determine the requirements, responsibilities and powers of senior leaders.

All parties in the UBC should elect and appoint senior leaders who are competent in managing the relationship between the university and its business partners.

Senior leaders should have the support of all levels of the UBC in supervision and management and resource allocation.

5.4.3.2 Provisioning required resources

The UBC should allocate enough resources for senior leaders to manage it.

The resources required for managing the relationship between the university and its business partners include but are not limited to:

— institutions;

— processes, systems and funds;

— personnel with innate and potential ability and competence.

5.4.3.3 Influencing on collaborative relations

During the period of the UBC, the communication mechanism of top management should be established to ensure that the relationship between the university and its business partners is kept on track. Senior leaders monitor the relationship and intervene in the relationship, when necessary, to overcome internal conflicts and solve problems that cannot be effectively dealt with at the working level. In addition, for partners collaborating with universities, the corresponding communication management mechanism should factor in both the size of the partner organization and the different kinds of universities, such as research-oriented university or applied university.

5.5 Governance and processes

5.5.1 What: Summary of the intent

The governance and processes of the UBC are important elements for structuring, sustaining and achieving the goals between the university and its business partners. Through the establishment of organizational structure, system and process, a joint management team is formed to achieve good governance, power balance and benefit sharing. A standardized operational joint RMP may be developed to guide potential conflicts or misunderstandings in the process of collaboration.

5.5.2 Why: Explanation of relevance

Establishing governance is a dynamic process. The responsibilities and division of labour should be clarified, and an efficient interaction should be formed between the university and its business partners. With the deepening of collaborative work, a complete and effective internal and external structure of joint governance should be constructed for long-term interaction and mutual construction. The contents and responsibilities relating to the division of labour should be adjusted and expanded accordingly, so as not to affect the behaviour, confidence, performance and subsequent participation of the two parties.

5.5.3 How: Implementation guidance

5.5.3.1 Planning implementation

Both the university and its business partners should set up mutual goals and make overall plans for all the necessary processes, to better standardize the implementation of the UBC. They should make reasonable arrangements in the agreements or terms of contract, and construct a two-dimensional governance framework that includes who will govern, what and how it should be governed, and how performance will be managed. The contents should balance the interests of all parties and achieve mutual benefit.

5.5.3.2 Implementation phase

In the process of implementation, the achievement of phased goals can be verified if the common goal of the project is set correctly. It should include management plan, scope, implementation plan and development of the project plan, cost management, resource supply, coping methods and support.

In developing relations, the university should understand its advantages in the collaboration and identify where it will have sustainable relations. Such collaborations should not only align with the legal and policy environment within which it operates but also make use of the incentives made available through this environment.

5.5.3.3 Assessment phase

It is important to check the effect of the implementation of the management plan. Through self-assessment and joint assessment, the results of the execution are compared with the predetermined targets, to see whether the results of the implementation conform to the standards and requirements set up in the planning stage, through to the performance appraisal of the collaboration of the project. An agreement on the foreseeable results and how to evaluate these achievements and/or failures should be reached. A joint management team should be established in the UBC project. The role of the senior executive or the designated representative of the UBC project should be clearly defined.

5.5.3.4 Solving problems

In the implementation of the UBC, the joint management team should:

a) adopt a unified problem-solving procedure;

b) organize and summarize all the information obtained in the inspection stage;

c) make a judgement and evaluation of the whole UBC process and the results against the expected goals;

d) ensure the smooth development of the relationship;

e) ensure that the direction and the development of the plan are consistent.

5.6 Collaborative competence and behaviour

5.6.1 What: Summary of the intent

The competence and behaviour of the UBC can be influenced by the environment faced by the university and its business partners to achieve the expected results from both sides. Collaborative competence and behaviour are necessary to avoid project risks caused by cultural differences and reduce the difficulties in project implementation.

5.6.2 Why: Explanation of relevance

The university and its business partners should seek to understand the capabilities and behaviour of collaborating parties in order to achieve the desired competence and behaviours. At the same time, collaboration, competence and behaviour can create greater value for each other. These capabilities include personnel and resources, such as specific plans, processes and assessments for collaboration.

5.6.3 How: Implementation guidance

5.6.3.1 Clarifying collaboration ability and behaviour

The university and its business partners should define the collaborative competence of their respective interested parties' internal and external resources and determine that such competence and behaviour are valuable and based on mutual collaboration.

5.6.3.2 Enhancing collaboration competence and behaviour

According to the performance objectives of the UBC, the university and its business partners should identify the input of key personnel and resources of the partners, and ensure that the personnel have the matching skill levels to support collaborative work. This ensures sufficient resources and support for the smooth development of the relationship. The university and its business partners should also improve and enhance capabilities and behaviours through regular training of personnel and reorganization of resources, including the training of partners in collaborative processes.

5.6.3.3 Assessing collaboration competence and behaviour

The UBC should regularly evaluate the competence and behaviours of the university and its business partners in collaboration. The main contents of the assessment include but are not limited to bilateral advantages, collaboration programmes, behavioural patterns, joint management and performance.

5.7 Trust and commitment to mutual benefit

5.7.1 What: Summary of the intent

The trust and commitment to mutual benefit established by the UBC should be realized through the process of collaboration. The trust and commitment to collaboration should be observed by both the university and its business partners.

5.7.2 Why: Explanation of relevance

The UBC requires mutual trust between the two parties and the commitment to future joint efforts to reduce the risks and uncertainties that can exist in the collaboration. Mutual benefit requires that the main body of the UBC realizes the exchange and collaboration of heterogeneous resources between the parties, so as to address the development needs of both sides.

5.7.3 How: Implementation guidance

5.7.3.1 Establishing collaboration through trust and commitment

The trust and commitment to collaboration are established by the resources, personnel, foundation, integrity and reputation of both parties. An integrated system and text embodying the trust and commitment of both sides in a legally effective way should be established.

5.7.3.2 Improving trust and commitment in collaboration

The trust and commitment to the collaboration should be maintained or improved, with the advancement of collaboration and environmental changes. These include maintaining mutual respect, mutual benefit and protection for each other's intellectual property rights.

5.8 Value creation

5.8.1 What: Summary of the intent

Value creation is a mechanism that creates value-added from the interaction between organizations. It is the core of any organization's establishment of a collaborative working relationship, as well as the constant search and production of new values to make relationships more effective and sustainable.

5.8.2 Why: Explanation of relevance

Establishing trust with partners and implementing resource sharing and information sharing can promote both sides to gain external benefits to achieve collaborative learning abilities, reputation or social credit. New collaboration points found or created in continual practice and improvement can generate greater value and promote the sustainable development of collaborative relationships. The value creation of UBC is not only reflected in the increase of profits and the strength of business partners, but also in the increase of industry influence. For universities, this reflects the improvement of teachers' skills, the strengthening of scientific research ability and the competitiveness of students.

5.8.3 How: Implementation guidance

5.8.3.1 Determining value

There are differences in value appeals between universities and business partners. Forming a unified value appeal is the basis for promoting collaboration and establishing collaborative relationships. The parties should combine their respective business objectives and resources to determine the meaning of value. The value of UBC includes personnel training, scientific research, service to society, financial ability, credibility and credit, and the intellectual property rights through collaboration.

5.8.3.2 Managing value creation process

Value creation is a dynamic process throughout the UBC. The parties should build learning organizations, respecting the culture of the partners, and enhance their reputation and social credit through collaboration. The partners should actively expand the scope of collaboration and collaborate closely and constantly to create collaborative value. The partners should manage the value creation process. The management process includes at least the following:

— define the meaning and the goal of value creation;

— establish the mechanism and method of realizing value creation;

— evaluate and improve the value creation plan.

5.9 Information and knowledge sharing

5.9.1 What: Summary of the intent

Information and knowledge sharing run through the whole process of UBC, including periods of argumentation, collaboration and termination (including exit and expiry). In the process of UBC, the partners carry out information sharing and knowledge management, guarantee information security, increase value and efficiency, and promote relevant organizations to develop incentive mechanisms for information and knowledge sharing, so as to achieve the goal of common value creation.

5.9.2 Why: Explanation of relevance

The sharing and management of information and knowledge are key factors for effective UBC. Information and knowledge sharing is carried out before and during the process of UBC, which should be clearly defined. The acquisition, analysis, creation, storage, control and updating of information should be clearly defined, and a knowledge management standard should be established, including the way of recording knowledge and the definition of sharing time, as well as the control of sharing methods and contents. The management responsibilities of both parties should be clarified, with a consensus reached on the ownership and control of intellectual property rights, in order to protect each other's information security and intellectual property rights and reduce risks.

5.9.3 How: Implementation guidance

5.9.3.1 Making plans

The UBC should develop guidelines and objectives for information and knowledge sharing as well as classifying information shared by partners and assessing information security and risks. Different information can have varying degrees of sharing and usage scenarios, so it is important to clearly define their respective intellectual property, standardize the scope of authorization and form a clear mechanism for information and knowledge sharing, and, at the same time, develop the information and knowledge sharing plan approved by both parties. The UBC should also build collaborative processes, such as recruitment, onboarding and a formal alliance/partner health check process. Both parties should be actively involved in the analysis of the process and the objectives of such collaboration should be clear. To further promote and facilitate the collaboration collaborative process, partners can use continuous monitoring of the objectives and analyse the feedback received regarding the knowledge transfer. It is recommended to create and use agreements/contracts (such as material transfer agreements) for the collaboration of knowledge and technology transfer. Each agreement is adapted to the parties involved.

5.9.3.2 Executing management

During the implementation of the UBC, corresponding information and proprietary data is formed. Partners should regulate and manage the information, and formulate and comply with management standards of information acquisition and use. For the joint knowledge generated, partners should negotiate and reach a consensus based on their respective contributions, forming the recognition and definition acceptable to both parties, formulating and observing intellectual property management regulations, and enhancing the participation and enthusiasm of members.

The two parties should formulate corresponding documents on the use of proprietary data and ownership of intellectual property, and clearly define the level of information and knowledge transfer as well as the content that needs to be shared.

5.9.3.3 Inspecting, processing and improving

According to the progress of the UBC, partners should check, process and improve the effectiveness of information and knowledge sharing management.

5.10 Risk management

5.10.1 What: Summary of the intent

Risk management is an important component in UBC. The ideal risk management forms a series of prioritized programmes. By balancing the proportion of opportunities and risks, parties can use effective resources to resolve the crisis and make accurate judgements and decisions on collaborative opportunities, which is conducive to the cognition and understanding of the greatest degree of collaboration between universities and business partners.

5.10.2 Why: Explanation of relevance

A risk management team should be established to lead the process. By taking professional quality and qualification experience into consideration, and keeping a fair and open way of selection, the risk management members or their designated representatives can be confirmed. With the minimum cost, the largest extent of safety guarantee is obtained in the effective execution of risk management. UBC establishes a complete system of standardization in areas such as financing, safety, production, equipment, logistics, technology, users, etc. It also employs official documents to determine the business opportunities for legal compliance between the two parties, as well as the consistency, reality, clarity and hierarchy of risk supervision, which effectively guarantees the smooth progress and sustainable development of collaborative projects.

5.10.3 How: Implementation guidance

5.10.3.1 Establishing risk management objectives

Interested parties of the UBC should develop a risk management framework, adopt the measurement standards to clarify the responsibilities, obligations, rights, benefits, opportunities and objectives of the UBC, and implement the responsibility, as well as the responsibility system, for risk management. These may include university administrators, teachers, students, business partners, governments and other organizations, based on the common goal of both parties.

When the collaboration is subject to qualitative risk, acceptable risk and unacceptable risk, the best control measures adopted by both parties should be conducive to the continuation of collaboration, resulting in the minimum loss and controllable impact on the target.

The interested parties of the UBC should actively mobilize corresponding resources to minimize the impact of the risks.

5.10.3.2 Developing a risk management plan

The interested parties of the UBC should establish a communication and negotiation mechanism, set up a special risk management team, understand and consider the interests of all interested parties, clarify their responsibilities in the risk management process and formulate risk management plans.

A risk management system should be established, defining its management provisions, measures, loss, transfer and compensation in the credit investigation, project evaluation, implementation details, execution plan, contingency plan and process supervision. The most effective way to control risks is to develop feasible contingency plans, supervise the process, implement measures and compile multiple alternative plans, and to make the best preparations for the risks.

In the process of a risk management plan, the interested parties of the UBC should make transparent the risk itself, its causes, its consequences and problems related to risk measures. They should provide real, relevant and accurate information, and help to enhance the confidence in risk management.

The risk management plan is an optimization process about risk control culture, standard, control, measurement and supervision for continuous implementation.

5.10.3.3 Identifying and evaluating risk

Identifying and assessing risks affect the effectiveness of risk management. Risk management is important to UBC. Risk and the perception of risk has a major influence on behaviours and, as such, can potentially impact outcomes.

UBC projects can face various risks. Based on the perception of risk, the risk management team applies risk identification tools and techniques appropriate to its goals, capabilities and risks, and make a comprehensive judgement on risk sources, affected areas, events and causes. Risk identification is not a one-time behaviour but should be throughout the whole process of UBC.

Using historical information and related methods to evaluate the identified risks, consideration should be given to the positive and negative consequences brought about by risks and the possibility of these consequences. Effective identification and reasonable assessment of risks helps the parties to grasp the risk information comprehensively, which is the basis for the orderly follow-up of risk management.[1]

5.10.3.4 Mitigating risk

After risk assessment, the joint management team should consider feasible methods that should be applied to different risks, taking into consideration the interested parties' values and viewpoints, and then choose the most appropriate risk response plan. Before the risk occurs, the team should focus on prevention, identify potential risks, and prepare the risk response plans and crisis management plans. Measures should be taken to mitigate risks and offset losses. After risk occurs, the emphasis should be on contingency and rehabilitation, including implementation of risk relief measures, preservation of information and lessons learned.

Risk control should include organization and implementation of a risk management plan. Its contents should include methods, responsibilities, time, budget, grading and description, tolerance, reporting format and tracking feedback. Interested parties in the UBC should closely collaborate, communicate and share information in a timely manner, and implement various processes and links of risk management. The parties should evaluate the implementation and management effectiveness in a timely manner and provide feedback.

Effective risk management should create and protect value. Risk management is a dynamic process throughout the UBC. The risk management team should be committed to adopting strategies that mitigate risks and minimize possible risks and reduce losses.

5.11 Relationship assessment and optimization

5.11.1 What: Summary of the intent

Relationship assessment and optimization refers to the continual attention and measurement of the health level of the collaborative relationship, including the assessment and optimization of the current, future and possible stages of UBC, clearly identifying which aspects are sustainable, and which ways can promote the sustainable development of UBC. The content of relationship assessment should include collaborative processes. For business partners, the UBC should offer specialized skills in the commercialization of their products and services. For the university, it is crucial for employees and alumni to get involved in the collaboration processes for cultivation of research. The assessment should consider the type of partner organization involved and the motivations such as the age, size and culture of business partners.

5.11.2 Why: Explanation of relevance

In the process of collaborative work, any changes in the environment of both parties poses a challenge to the relationship. The joint management team should constantly evaluate and monitor the relationship, provide early cognition for the university and its partners, solve problems actively within the collaboration period and optimize performance to achieve the parties' goals. At the same time, it can discover new potential opportunities through the relationship assessment and optimization that can promote the sustainable development of UBC.

5.11.3 How: Implementation guidance

5.11.3.1 Determine the content of the assessment

The evaluation of relationships should monitor and analyse objectives, processes and behaviours, and evaluate the effectiveness of the arrangements including:

a) the execution of targets and influencing factors;

b) the strength of the relationship;

c) the duration of the relationship;

d) the value added by the relationship.

5.11.3.2 Organization evaluation

The joint management team regularly evaluates and optimizes the relationship and behaviours, and adopts appropriate monitoring, measurement, analysis and evaluation methods to record the results of analysis and evaluation and related information, and to form evaluation archives and reports.

5.11.3.3 Feedback evaluation results

The collaborative performance reflected in the relationship assessment is the basis for continuous and optimized performance. Through assessment, the joint management team can find that areas, risks and opportunities that need improvement are also related to the revision of partner selection criteria. The UBC can be expanded or consolidated. The university should strengthen the analysis and application of the results of the relationship assessment. For the existence of obstacles or lack of necessity, the exit strategy should be considered in a timely manner.

5.11.3.4 Optimize partnership

The joint management team should pay close attention to every aspect of UBC and establish a long-term and stable mode of operation. They should continuously improve collaboration objectives and the collaboration process, enhance collaboration relations, and provide monitoring and evaluation of the relationship.

5.12 Exit strategy

5.12.1 What: Summary of the intent

The exit strategy is the strategic arrangement for the exit from the collaborative relationship of one or more parties of the UBC. The exit strategy of the UBC can occur after or even before the completion of the UBC project. The exit strategy varies depending on the nature and objectives of the university and its business partners.

5.12.2 Why: Explanation of relevance

An exit strategy of a UBC should not be regarded as negative. The joint exit strategy of the UBC can enhance mutual understanding among the university and its business partners, eliminate uncertainty and enhance the effectiveness of the UBC. It is possible to strengthen the participation of all parties in the UBC. Understanding the rules and reasons of exit can increase the transparency and confidence in participating in UBC.

5.12.3 How: Implementation guidance

5.12.3.1 Formulating an exit strategy

In order to maximize the positive role of the exit strategy in the UBC and avoid adverse effects, the joint management team of the UBC project should formulate the exit strategy of the UBC in advance and stipulate clearly all aspects of exiting the relationship.

This mainly covers:

a) information, including knowledge transfer and data protection;

b) assets, including intellectual property rights, permits, equipment and facilities;

c) resources, including finance, human resources and technology;

d) interested parties, including their security, safety and business continuity;

e) specific exit processes and rules, etc.

The exit strategy should highlight the factors of audit and business processes, and serve as a working document during the whole collaboration period.[2]

5.12.3.2 Starting an exit strategy

The UBC management team evaluates the overall relationship between the university and its business partners from various aspects of UBC performance, risks and business opportunities. The specific contents include the short- and long-term goals of the UBC, resources, potential power, competency and continuity in the UBC. They also include the financially interested parties in the UBC (university, business partners, government, industry, teachers, students), and the financial impact of the UBC. According to the result of the evaluation, the decision-makers of the university and its business partners make the decision on whether to exit from the relationship according to the predetermined exit process and rules. The parties should ensure that all aspects of the exit strategy have been disposed of. In the process of exiting, they should ensure that the parties take a mutually respectful standpoint.