

EVIDENCE-BASED PRACTICE: IMPLEMENTING THE COMPAS ASSESSMENT SYSTEM

Creating an Evidence-Based Organization

We use an organizational planning framework to align the outcomes targeted by an agency with the capacity of the COMPAS assessment system to reach those targets. The framework links what the agency is trying to accomplish with how these outcomes will be achieved, why the approach is expected to work, and with an understanding of the populations for whom these efforts are intended. Specifically, the practice framework creates the capacity to:

- Systematically integrate evidence-based practice (EBP)
- Integrate principles of practice across the organization to derive system efficiencies and outcomes
- Develop programs, activities, and processes for meeting client, community, and system needs
- Conduct process, outcomes and impact evaluations of complex programs
- Understand causal relationships between core program components and outcomes
- Assess organizational networks and support infrastructure which leads to the capacity to sustain, improve, and extend services
- Align system goals with the organizational culture and human capital of the agency to support engagement in the change process at all levels of the organization

Criminal justice agencies are increasingly challenged to develop their organizational competency to learn and use evidence-based practices in order to improve correctional outcomes such as:

- Operate safe criminal justice organizations,
- Reduce crowding,
- Manage caseloads and commensurate workload,
- Manage budget priorities and limitations,
- Produce and sustain public safety,
- Adapt to political, social, technological and economic changes,
- Align resources with organizational intentions,
- Provide appropriate, quality services to clients in the right dosage,
- Align agency infrastructure to support case management practice, and
- Ensure outcome performance and monitoring.
- Attract and retain a high-quality workforce, committed to the vision of the organization

One of the more formidable challenges of adopting evidence-based practices is changing the existing practices to appropriately support new improvements. A major trend in corrections practice is the opportunity to partner science (e.g. COMPAS) with practice in the interest of addressing this challenge. Criminal justice agencies are moving toward an evidence-based methodology in which work can be evaluated using measures of efficiency and effectiveness.

The evaluation process requires agencies to define relevant outcomes and to clarify how these outcomes will be achieved. Using an organizational blueprint where the logical connections among outcomes, practices, the agency's rationale, and assessment are specified facilitates these definitions. Once complete, the agency's blueprint may be evaluated and improved based on the agency's capacity to achieve its intended purpose.

We have worked with numerous agencies assisting in the planning and implementation of community and institutional case management, evidence based practices, risk/needs assessment, management information systems and other new technologies. We believe that the successful implementation of any technical innovation requires deliberate plans and preparation to ensure the successful adaptation of the technology to the agency and to the long-term sustainability of the approach. Successful implementations happen as a result of effective leadership, planning, resource management and "getting things done." When these elements are present and well coordinated, successful implementations occur and along the way we learn more about effective practices.

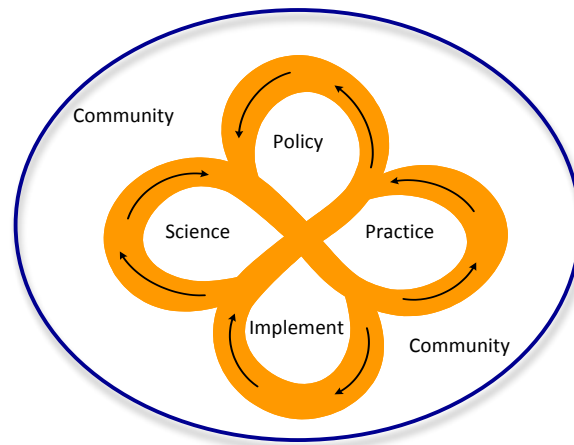
Establishing an Evidence-Based Approach

Justice and human service agencies are moving toward an evidence-based methodology in which outcomes drive practice. For a system to become evidence-based there must be a clear link between outcome objectives and the variety of efforts used to produce these outcomes. Northpointe facilitates this process by asking systems to specify a blueprint of the connections among outcomes, practices, the agency's rationale, and demand for service. Once complete, the agency's blueprint informs practice and is used to evaluate the agency's capacity to achieve its intended purpose.

Learning is at the core of all discussions about evidence-based practice in public-sector systems. These discussions generally involve a learning process where policy, implementation, practice, and science domains are integrated to ensure that the most effective approaches are identified, supported by policy and implemented with fidelity to achieve the outcomes of an initiative.

The diagram below offers a method of conceptualizing the evidence-based learning process. There are several relationships between features in the diagram. For example, knowledge is developed and used as a part of a continuous relationship between science and practice. Practitioners identify practices used to produce success in their role, often on the basis of experience. These practices may be shown to have evidence of effectiveness as a result of anecdotal stories, tradition of use, or other methods. The relationship with science implies that these practices are formulated into research questions and passed to science for controlled scientific testing. In this respect, practice feeds science with questions to be tested and the results are fed back to practice for consideration and, when appropriate, implementation.

Figure 1: Learning Process for Evidence-Based



Similarly, a number of individuals and agencies are assembling the results of scientific research and are sharing these findings with practice. Practitioners are using these evidence-based strategies to refine/replace current practices. The cycle produces an “evidence-base” with an emphasis on identifying master quality practice and science then using each to improve the outcomes in systems.

The learning cycle also incorporates policy formulation and management. Legislative and agency policy guides agency practice. Policy is used to ensure evidence-based practice strategies are priorities in the intra and inter-system designs. The learning process running through policy, practice and science spawn innovation and improvement strategies. These strategies are implemented creating new knowledge.

Finally, and perhaps most important when considering reentry, the whole process happens within the context of communities. The community includes formal and informal institutions that shape the environmental conditions affecting behavior and which provide leverage points for improving conditions in the lives of individuals and families.

It is our intention, through the involvement of you and your partners, to facilitate a learning process in the course of the implementation. The framework above helps to ensure that the voices of participants from various domains are heard, valued, and integrated into the design of solutions.

Aligning the COMPAS Solution with Agency Priorities

Simply adding new technologies to a system merely adds to its complexity. Without a thematic structure to tie the pieces together, this increased complexity weakens the system's capacity to maintain order and damages its capacity to implement anything successfully

—Harris & Smith, 1993

We present a series of approaches we have routinely used to prepare partners with the fundamentals of case management practice. With these fundamentals prepared, we have found that systems are in a better place to define and promote the value of case management in their practice.

If the agency prioritizes evidence-based practices and specific outcome objectives, it thereby increases the need for a well-specified project blueprint. In essence, institutionally-based systems must implement approaches with sufficient design integrity to be tested for effectiveness as the initiative matures. These evaluations require systems to specify the logic of their effort. When the logical connections among outcomes, practices, the rationale, and assessment of stakeholders are specified, systems are prepared to examine and improve programmatic capabilities. We recommend the use of three system-planning tools:

- Specification of a blueprint to align the outcomes targeted by the agency and the capacity in the COMPAS Suite.
- Definition of the case flow process
- Specification of the case management logic

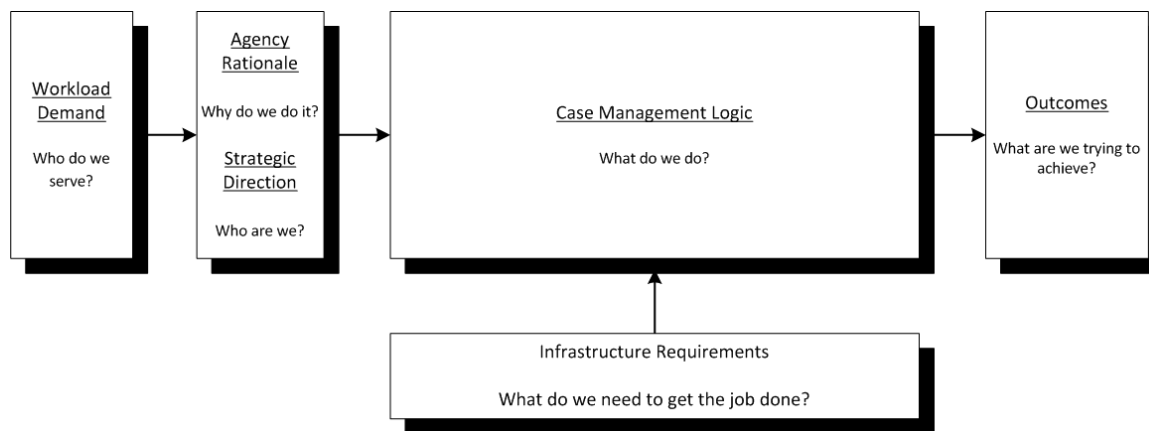
A major deliverable is a detailed articulation of the approach to case management clarifying what will be done, who will do it, and how it will impact outcomes to ensure the technical case management solution supports the work of the initiative. In particular, the summary will:

- Specify the initiatives logic linking targeted outcomes with the mechanisms that will be used to achieve these outcomes. This specification should clearly define how the evidence-based services will reduce violent events in the community and schools
- Articulate the rationale that underlies how and why the services deployed by the agency will achieve the desired outcomes
- Individualize understanding of the individual in the social environments targeted by the initiative—e.g., institutions, families, and communities
- Define the network of service providers including their roles and responsibilities in ensuring the case management process is executed and that individual-level performance is documented
- Specify the infrastructure requirements needed to support the design of the agency. Infrastructure includes policy, procedure, budget, buildings, equipment, technology, personnel and training. In each instance, the infrastructure must be designed and aligned with the goals of the initiative to ensure success.

The Northpointe System Planning Blueprint

The system-planning blueprint below provides a framework for defining the intention of the system. The blueprint includes five principle functions. The first, outcomes, captures the definitions of what the initiative is trying to achieve. The second component, Case Management Logic, describes the work that will be done in communities to produce the desired outcomes. Within Case Management Logic are dimensions of assessment, interpretation, planning, intervention, and evaluation. These five dimensions are the basis of effective case management practice.

Figure 2: The Northpointe System Planning Blueprint



The value of the case management solution increases as the alignment with practice, particularly evidence-based practice, improves. The blueprint will help partners focus on the effectiveness of their case management approach and monitor their approach for fidelity and impact using performance indicators that reinforce evidence-based strategies for addressing the causes of youth violence in the community.

The third principle function is the rationale for the case management system. Rationale may be a variety of components including vision, mission, principles, and theories. The rationale answers the question why. Specifically, why do the community partners expect the efforts in the case management design to produce reductions in violence? The answer to this question should tie back to the evidence-based knowledge that underlies the assessment technology and the effective practices in the evidence base. This alignment coordinates efforts in the initiative, provides guidance to practitioners of the purpose of their work, and creates a systemic response capable of being evaluated for effectiveness.

The fourth component—Workload Demand—is an understanding of the workload drivers—e.g., social, technical, economic, and political trends—affecting the demand for service in the system. Workload demands are measured at these macro levels and at the level of the system, agency and individual. The COMPAS risk and need assessments are used to inform individual level indicators within the context of their family, school and community. Effective assessment technologies will ensure that the variety of information informed by the agency rationale, practices and outcomes are available in the decisions of the system. As such, these assessment designs need to be nimble enough to produce reliable and valid measures of

particular risks and needs across a variety of decisions. COMPAS has been designed to meet these criteria.

Finally, justice and human service systems require a broad range of infrastructure. Infrastructure includes a range of capacities including technology, funding, policy formation, staffing and training, buildings, equipment, communication and coordination mechanisms and management activities. It is very useful to conduct a detailed assessment of both the inter- and intra-organizational infrastructure needs to ensure the infrastructure supports the case management design and the work of the initiative. Clearly inventorying needed infrastructures is especially important because infrastructure for supporting effective services are usually extensive, undervalued by the public, difficult to maintain, constantly changing, and routinely cut across numerous agency boundaries in the human services and justice system.

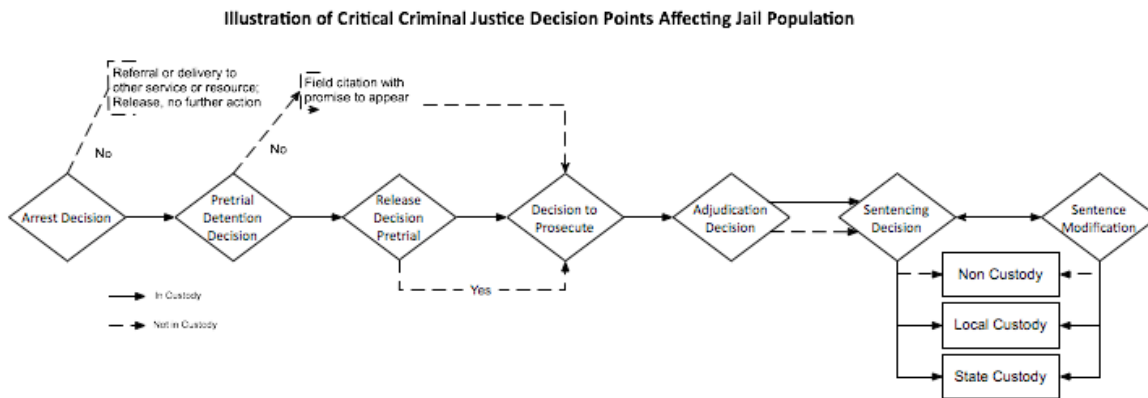
This blueprint is used by Northpointe to create a common architecture for understanding and improving system processes. In this work, the alignment opportunities are specifically targeted to optimize the flow of work and information and to facilitate the most efficient and appropriate use of resources. This process also affords the opportunity for agencies to explore a variety of evidence-based improvements and build an infrastructure to monitor results.

Primary Case-flow Process

Mapping the case-flow process is a way for systems to align decisions. The justice and human service systems are characterized by a common series of decisions. The decision points form a literal “playing field” upon which the efforts of a variety of partners play out to produce outcomes. As a result, the agencies that make up the system must work to specify the design and quality of the decisions within their responsibility. Moreover, these agencies are responsible for assuring the flow of information into and out of their decision processes. These efforts help assure the alignment required to demonstrate system performance—e.g., outcomes.

Systems are mapping these decision points to clarify their linkages and alignment with other functions. The illustration below provides a general example of the case flow process for correctional institutions. A detailed case flow process is produced or adopted from prior work to clarify the process and focus of the assessment and broader case management work.

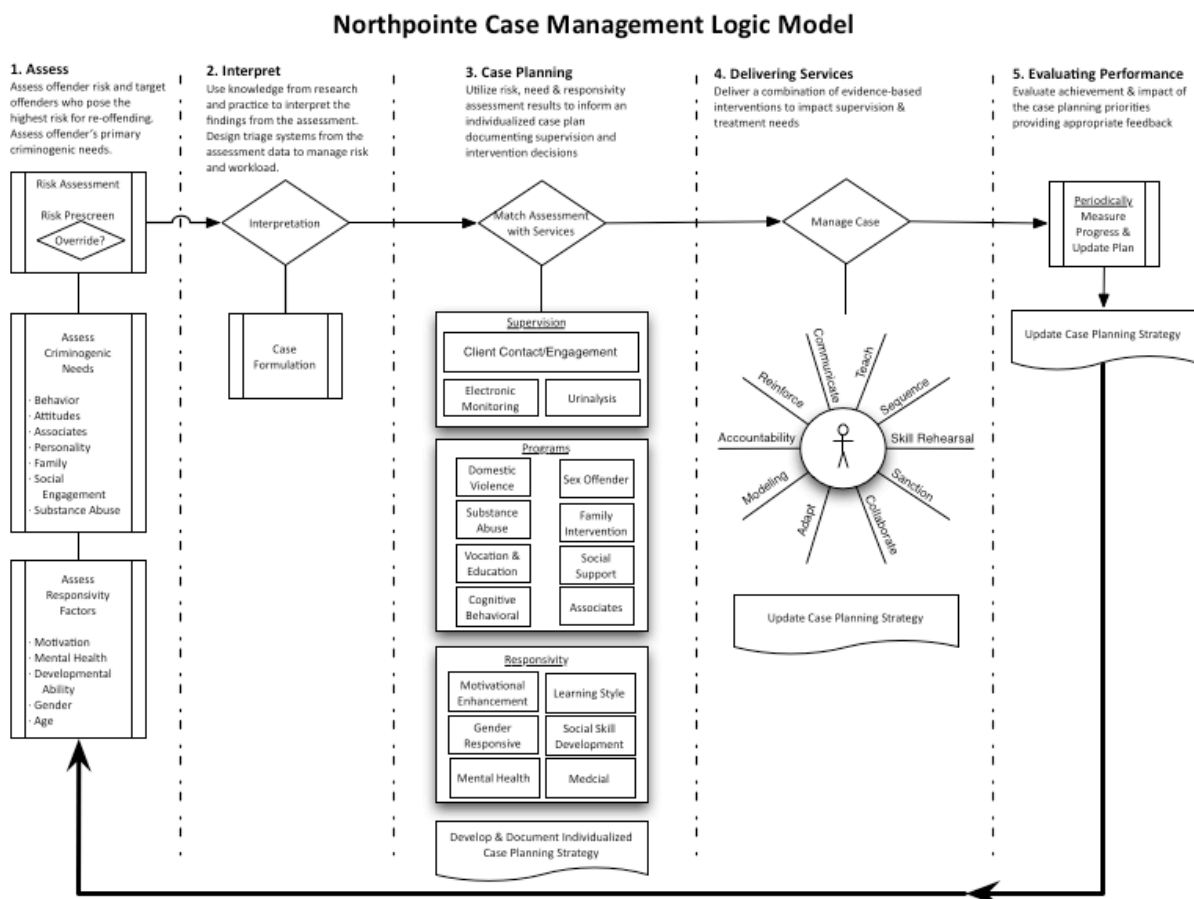
Figure 3: Example of Criminal Justice Case Flow



Case Management Logic Model

With the case-flow process specified, there is an opportunity to explore how the case management practice occurs. The case management logic model provides a framework for linking casework with performance, a critical linkage in establishing the effectiveness of the approach. The case management logic includes assessment, interpretation, case planning, programming and evaluation. It has been our experience that specifying these fundamental stages of case management helps to standardize and communicate the approach while providing an objective reflection of the strengths and weaknesses of the process. **Figure 4** is a graphic representation of the case management logic model.

Figure 5. Community Case Management Logic Model



COMPAS IMPLEMENTATION PLANNING

THE IMPORTANCE OF IMPLEMENTATION

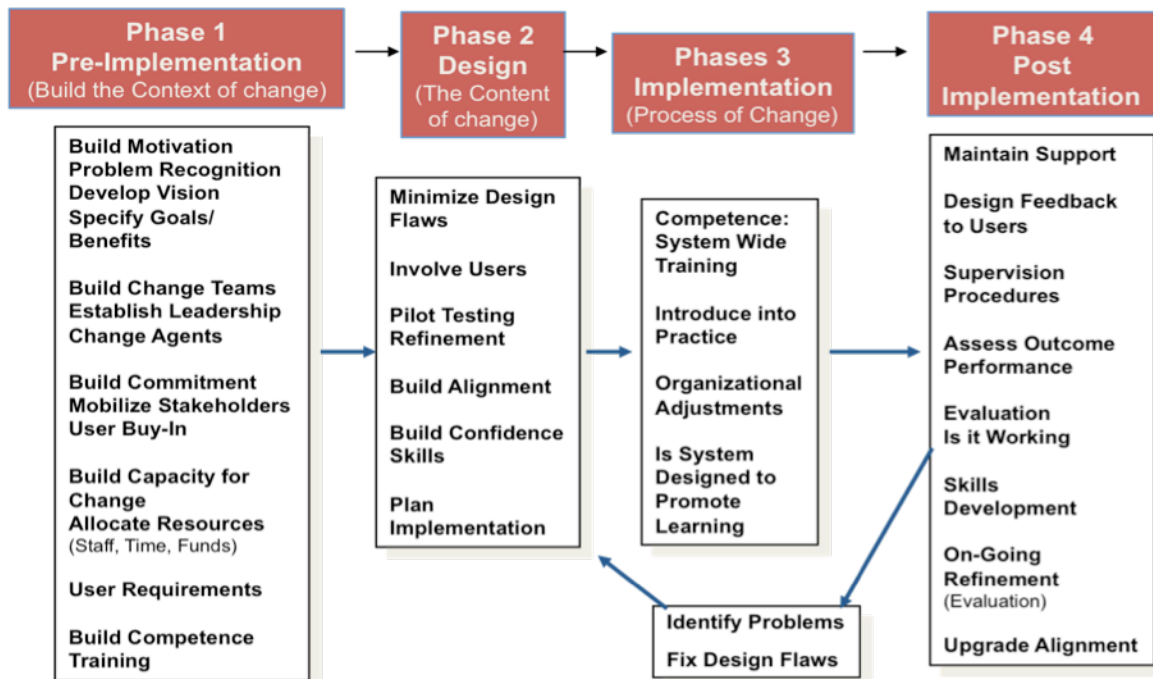
Northpointe has worked with a variety of justice and human service agencies assisting in the planning and implementation of management information systems and new case management practice. We noticed that even the most well-intentioned sites often staggered in their implementation efforts. The success of implementation is highly sensitive to the organizational readiness of the agencies involved. Implementation problems have been noted repeatedly in risk assessment and case management with implementation failures documented in systems serving both adults and youth.

In the interest of promoting a successful implementation experience, we propose a generalized model to provide participants with an understanding of the sequential phases, tasks, and challenges when managing complex change. The model aims to clarify the many management actions, tasks, and staff roles needed at key phases of implementation. The development of this general model of implementation was influenced both by the field experiences and by several prior models of strategic change: the strategic approach of Pettigrew et al.; Walton's process framework; the work of Harris and Smith and Ellickson and Petersilia in criminal justice implementation; and Bushe and Shani (1991) in clarifying the "learning capacity" of an organization.

Major Phases of Implementation and Their Key Tasks

The following implementation strategy was developed in the course of the 150 case studies involving the implementation of assessment procedures across the country. This framework identifies four main stages that exist in any implementation challenge. Each stage entails specific skills, challenges, and roles. The stages are only approximately sequential in the sense that an agency may have to "loop backwards" to upgrade or strengthen a particular task that may have been overlooked or was only weakly accomplished at an earlier stage. In addition, all skills and techniques to be learned during implementation will require regular practice and review of staff proficiency levels, to ensure high quality intervention, implementation fidelity and sustainability of the effort. The model integrates Walton's three-stage model and Pettigrew's domains of strategic change, and also aims to incorporate the lessons learned from the few available prior criminal justice studies of implementation.^{7,8} The model is shown schematically in Figure 1. A detailed explanation of each task in these phases is provided below in the Project Plan.

Figure 6: Major Phases of Implementation and Key Tasks



PHASE 1: PRE-IMPLEMENTATION

The first phase of virtually any change process involves problem recognition, capacity building, political acceptance, and other early tasks that must be accomplished before finalizing the design of the new assessment program. It includes several political tasks: placing a problem firmly on the policy agenda (problem recognition), forming a supportive coalition, mobilizing resources, developing a compelling "vision" to motivate and guide change, and building a capacity for change. These early tasks include:

- Recognizing the initial problem/challenge
- Build and mobilize a supportive coalition
- Develop a "vision" of desired goals and benefits
- Build a leadership structure to handle change
- Building competence in key skills
- Specifying performance requirements for the new procedure
- Select or develop provisional designs
- Develop (and continually update) a project plan
- Identify barriers to successful implementation and how they might be overcome/removed.

PHASE 2: DESIGN: PRELIMINARY TESTING, VALIDATION, AND EVALUATION

In the second major phase of implementation provisional designs of the new procedures are tested, compared, and refined. This must occur before any incorporation into routine use. For most corrections agencies, pilot tests are used to determine whether a proposed

assessment design could achieve the desired goals, to locate design flaws, and to determine whether refinements are needed. The innovation design phase typically involves:

- Finalize performance requirements
- Finalize a "provisional" design
- Provide training in the provisional procedures
- Identify fertile ground for a pilot test
- Conduct a pilot test
- Assess alignment between the new procedure and the organizational context
- Make refinements as necessary
- Develop an on-going implementation activity plan

PHASE 3: IMPLEMENTATION

In this third phase the new policy, program, or procedure is introduced into standard operations; the emphasis shifts to detailed project management. The major challenges -- building a suitable design, building competence, and building commitment - are still deeply involved. The following tasks are critical:

- Develop mechanisms to monitor progress
- Allow adaptive problem solving and design flexibility
- Conversion from the old to the new system
- Maintaining commitment and buy-in
- Build competence and skills
- Making needed organizational adjustments
- Making needed workload/staffing adjustments

PHASE 4: POST-IMPLEMENTATION

This final phase of implementation focuses on consolidation, problem monitoring, evaluation, and on-going development of the procedure. Corrections managers cannot assume that the goals of the new assessment will be reached automatically and the procedures will be used as formally designed. Program integrity must be monitored carefully. The following tasks and skills are required at this phase:

- Assess the impact and effectiveness of the new system
- Monitor the integrity of implementation through process evaluation
- Continue to develop and revise the assessment design
- Building the management's change skills
- Maintaining skills and competence
- Designing management reports
- Identifying "latent dysfunctional" elements of the implementation (burnout, turnover, morale, regression).