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## METHODOLOGICAL ONLINE TRAINING KNOWLEDGE BASE IMPLEMENTATION FOR BUSINESS ANALYSTS IN EBA SYSTEM

**Abstract.** A Document Management System (DMS) provides for the efficient and effective control, management and storage of large volumes of information, and ensures that staff can quickly and easily access up-to date information. [1] By using DMS we can make a connection between humanity and technologies. System for automation creates and provides safe and fast online access to created online documentations for such kind of corporations. And analysts should be able to control automation, correctly formulate the concept and improve the processes of the system.

The main purpose of this work is - creation of web-based methodological knowledge base, which online training for analysts in the field of automation of main processes with tool - eBA system.

**Keywords:** Document Management Systems, Automation Process, Knowledge Bases, Business Analyst in Automation Processes, Online Course Advantages

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**Аңдатпа.** Қазіргі таңда процестерді автоматтандыру жұмысы ақпараттық технологияның дамуына негізгі қадам. Құжат айналым жүйесін қолдану арқылы адамзат пен технология арасындағы байланысты орната аламыз. Автоматтандыру жүйесі әр түрлі мекемелерде қауіпсіз, әрі жылдам онлайн құжат айналымдарын қамтамасыз етеді. Құжат айналым жүйесі тиімді бақылауға, үлкен көлемді ақпараттарды басқаруға және сақтауға, бұл қызметкерлер тез және оңай ақпаратқа қол жеткізуге мүмкіндік береді. Біз білетіндей, автоматтандыру қағазсыз айналымда процестердің сапасын жақсартады. Осы тұста ІТ сарапшылары автоматтандыруды қадағалай алуы, тұтынушыларға дұрыс тұжырымдар жасай алуы және жүйедегі процестерді жақсарта алуы тиіс. ІТ сарапшылары тез және дұрыс үйренуі мен дамуы үшін ең ыңғайлы құжат айналым жүйесіне eBA жүйесі таңдалынды.

Жұмыстың негізгі мақсаты – eBA жүйесін пайдаланып ІТ сарапшыларына онлайн түрде оқытатын жоғары сапалы веб-негізінде білім дайындау.

**Кілт сөздер:** Құжаттарды Басқару Жүйесі, Автоматтандыру Үдерісі, Білім Негіздері, Автоматтандыру Үрдісіндегі Бизнес-Аналитик, Онлайн Курстың Артықшылықтары

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**Аннотация.** В наше время работа с автоматизацией процессов является одним из основных шагов для развития информационных технологий. Используя систему управления документами, мы можем установить связь между человечеством и технологиями. Система автоматизации создает и обеспечивает безопасный и быстрый онлайн доступ к созданной онлайн документации для разных корпораций. Система управления документами обеспечивает эффективное управление и хранение больших объемов информации и обеспечивает что сотрудники могут быстро и легко получить доступ к актуальной информации. Как мы знаем, автоматизация может улучшить качество процесса без бумаги. И аналитики должны иметь возможность контролировать автоматизацию, правильно формулировать концепцию и улучшать процессы в системе. В автоматизации лучшей системой управления документами будет система eBA для разработки и обучения бизнес-аналитиков быстро и правильно. Основной целью этой работы является создание высококачественная онлайн-база знаний, которая онлайн-обучение аналитиков в области автоматизации основных процессов с помощью инструмента - eBA системы.

**Ключевые слова:** Системы Управления Документами, Процесс Автоматизации, Базы Знаний, Бизнес-Аналитик в Процессах Автоматизации, Преимущества Онлайн-Курса

## Introduction

Creation of web-based training knowledgebase.

Methods. 1) Used one type of method is a content analysis that is a research method for studying documents, which can be texts of various formats, pictures, audio or video [2].

2) In order for business analysts to understand the work in the field of automation, the research method was used. The method, for this tool was enable create new web knowledge base that will allow business analysts to address significant automation process questions and by eBA system be explained well enough so others can learn the tool by this course. The necessary create useful video and document tutorials for everyone.

3) The empirical experiments of this paper are demonstrated with two e-learning company-training programs. The proposed model could be used to evaluate effectiveness by considering the fuzziness of subjective perception, finding the central criteria for evaluating, illustrating criteria interrelations, and

finding elements to improve the effectiveness of e-learning programs. Moreover, the results show that the effectiveness calculated by the proposed model is consistent with that from traditional additive methods.[9]

Stages of online training course.

The online training course structure consists of technical part, which includes administrative support. Also have user part , which includes learner’s, mentor’s and supervisor’s priorities and actions to control online course.

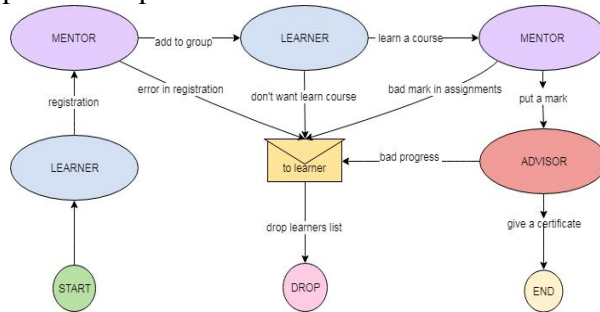


Fig.1.1. The process of online training course for completion

Technical part

1.2 Administrative support priorities and actions. A common thread among the plethora of definitions of knowledge management is that its objective is to identify and leverage the collective knowledge in an organization to help organizations compete and survive. One potential lever is e-learning, the creation and distribution of organizational knowledge through the online delivery of information, communication, education, and training [3] In this training course very important create administrative support that can control and manage all situation. Admin can add, change and drop learners, mentors and supervisors, lessons, groups, time table. Also can give access to lessons, send news for students and supervisors.

Issues include creating a learning environment and the tools to deliver the learning program.

Technical requirements, such as the server that supports the learning program, access to the server, bandwidth and accessibility, security, and other hardware, software, and infrastructure issues are addressed [4].

User part

2.1 Mentor’s priorities and actions. The mentor deals with issues related to the management of a blended learning program, such as infrastructure and logistics to manage multiple delivery types. Delivering a blended learning program is more work than delivering the entire course in one delivery type. The management dimension also addresses issues like registration and notification, and scheduling of the different elements of the blend [3].

Mentor can give access to lessons, put marks and manage with progress for learner. It means after sending assignments, mentor should check then put

marks in personal portal. Mentor will teach for one or more learners. Also prepare right learning is main action.

The Evaluation dimension is concerned with the usability of a blended learning program. The program should have the capability to evaluate how effective a learning program has been as well as evaluating the performance of each learner. In a blended learning program, the appropriate evaluation method should be used for each delivery type.

## 2.2 Supervisor's priorities and actions

The Pedagogical dimension is concerned with the combination of content that has to be delivered (content analysis), the learner needs (audience analysis), and learning objectives (goal analysis). The pedagogical dimension also encompasses the design and strategy aspect of e-learning [4]. Supervisors can monitor the progress of all learners, after monitoring will decide to give certificate for completion.

Three critical success factors in online delivery are identified: technology, the instructor and the previous use of the technology from a student's perspective. Analysts argue that the supervisor will continue to play a central role in online education, albeit his or her role will become one of a learning catalyst and knowledge navigator [5].

## 2.3 Learner's priorities and actions

Despite lots of advantages these educational environments provide for organizations, yet there are many unresolved problems which cause instructors and training managers with some difficulties to get proper information about the students' learning behavior. On one hand, lack of tools to measure, assess, and evaluate the performance of learners in educational activities has led the educators to fail to guarantee the success of learning process. On the other hand, strict structure of learning materials prevents students to acquire knowledge based on their learning style. Consequently, developing tools monitor and analyze the learner's interaction with e-learning environment is necessary [6].

Learner can start course, monitor own progress, schedule, mentor's information and grades. For learner very important easy to use and understand. Every e-learning course must demonstrate all of these components - naturally, in different formats depending on the course content and its learning objectives. Contrary, students must comprehend the content and be able to demonstrate it practically. The assignment results show no substantial differences. Lessons learned from our methodology development allow us to make its generalization and recommend those educational activities that lead towards a higher portion and quality of tacit knowledge [7].

For what is done online training knowledge base to business analysts ?

- Help to think like a business analyst, manage operations, data, information and resources;
- For assist business analysts take materials, tutorials about automation sphere and show how work with DMS tool;
- Learn to designing a system to meet the business goals;
- Developing specifications, diagrams and flowcharts for programmers to follow;
- Overseeing implementation, coordinating tests and observing initiation of the system to validate performance;

Review of methodological online training course.

The Course Benefits:

- Mentor: In this course for every learner will mentor, that can help to increase experience in automation department.
- Syllabus: We came up with a unique list of topics that will help you gradually work your way into the automation world.
- Assignments: It is going to be completely interactive. Our aim is to make each learner feel like a brainstorming session.
- Practice sessions: With each topic, we will give you assignments in a way that you will get to apply the theory you learned immediately.
- Video-document tutorials: It helps to make processes again and repeat this knowledge base.
- Certificate: After training course learner can take certificate of business analyst in automation department.
- Support: Our Team is going to be available to you via email or the website for you to reach out to us.

To control all above this we need business analyst, who is a strong negotiator and facilitator, consensus builder who is able to cope with challenging situations and to interact with different professional levels, outstanding communication, marketing, and convincing capabilities, highly self-motivated and self-driven personality integrative person who is able to motivate others, high degree of flexibility, independent and proactive working style, ability to work well under pressure and on multiple and conflicting priorities, strong commitment to quality and timely customer service, exceptional interpersonal skills, including presentation skills and communication skills at all levels, ability to identify opportunities to enhance productivity, increase efficiency, simplicity, and add measurable, tangible and intangible values [8].

Educational program.

Educational program consist of 3 main levels:

Level 1 - Business Analysts, where learner will study about business analyst, how should or must do in all process. In this level has 5 lesson and

extra lessons, that is more theoretical and after every lesson has a assignments for training.

Level 2 - Practice in eBA System, where learners will practice with tool eBA system, where learner will experimentalism with workflow studio instruments, codes and errors. Also 3 lessons and extra lesson help to increase learner's opportunity understand more detail after every lesson has a assignments for training..

Level 3 called - BA in eBA System.

This level created for learners to feel their like as a business analyst, conversation between client and business analyst, work as developer and own design in processes and after every lesson has a assignments for training.

Implementation of online training course.

In the implementation, it is very important to have the correct information about course to register a student, the UI/UX design and methods. The basic reason for e-learning evaluation is to find out the effectiveness, efficiency, or appropriateness of a particular course of action. E-learning effectiveness evaluation intends to highlight good or bad practice, detect error and correct mistakes, assess risk, enable optimum investment to be achieved, and allow individuals and organizations to learn [9].

Result

Very important create an active and regularly updated online knowledge base content. And successfully implemented and managed knowledge base content can empower your learners and students to manage time to end training course. Three level will increase opportunity to show progress students. Unfortunately all information in pdf format. But in our case this is not bad way to teach.

The Resource Support dimension deals with making different types of resources (offline and online) available for learners as well as organizing them. Resource support could also be a counselor/tutor always available in person, via e-mail, or on a chat system [4].

The last view for users developed as shown in Figure 7.2. Home page consists of registration, links module for learners, mentors and supervisors. Content where shown syllabus, and about us, team and contacts.

In the Figure 7.3. Completed panel of Administrative support module, where admin can add, rename, delete, block and send personal message, reset password to students.

Figure 7.4. Knowledge base content in web page realized by methodological methods for e - learning.

Future work

Not everybody should have access to everything. Specifically for creating and editing, have one or two members with access so that your knowledge base is always accurate and free from errors [10].

That is why:

The opportunity for administrative support and mentors to give access for learners in every lesson and create new group in every level to control.

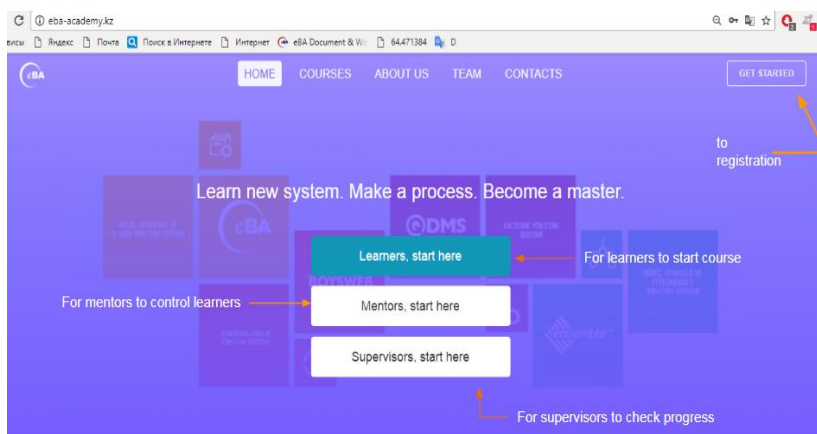
The opportunity of mentors, supervisors to send news in own module to learners.

Add text document tutorials to learner's module (right now pdf format links).

Prepare new 3-5 video tutorials for automation processes (right now 3 video tutorials).

Useful timetable or schedule in user's module (right now has general timetable).

The automation progress in the whole process.



\*Fig.7.2. Realized knowledge base for business analysts - [eba-academy.kz](http://eba-academy.kz)

eBa academy   ADMIN		Algerim Abubakirova		Logout	
Student   Mentor   Subject   Group   Supervisor   Schedule					
Add new student		News (Student)			Search...
1	Alibekuly Sherkhan	Username: sherkhan.alibekuly	Пароль: <a href="#">Сбросить пароль</a>	<a href="#">📖</a> <a href="#">✎</a> <a href="#">✖</a> <a href="#">🔒</a> <a href="#">✉</a>	
2	Bokenova Marzhan	Username: marzhan.bokenova	Пароль: <a href="#">Сбросить пароль</a>	<a href="#">📖</a> <a href="#">✎</a> <a href="#">✖</a> <a href="#">🔒</a> <a href="#">✉</a>	
3	Kairatuly Zharas	Username: zharas.kairatuly	Пароль: <a href="#">Сбросить пароль</a>	<a href="#">📖</a> <a href="#">✎</a> <a href="#">✖</a> <a href="#">🔒</a> <a href="#">✉</a>	
4	Massimkhanov Aldiyar	Username: aldiyar.massimkhanov	Пароль: <a href="#">Сбросить пароль</a>	<a href="#">📖</a> <a href="#">✎</a> <a href="#">✖</a> <a href="#">🔒</a> <a href="#">✉</a>	
5	Nurdauletova Marzhan	Username: marzhan.nurdauletova	Пароль: <a href="#">Сбросить пароль</a>	<a href="#">📖</a> <a href="#">✎</a> <a href="#">✖</a> <a href="#">🔒</a> <a href="#">✉</a>	
6	Sultanbek Bekaidar	Username: bekaidar.sultanbek	Пароль: <a href="#">Сбросить пароль</a>	<a href="#">📖</a> <a href="#">✎</a> <a href="#">✖</a> <a href="#">🔒</a> <a href="#">✉</a>	
7	Test User	Username: test.user	Пароль: <a href="#">Сбросить пароль</a>	<a href="#">📖</a> <a href="#">✎</a> <a href="#">✖</a> <a href="#">🔒</a> <a href="#">✉</a>	

\*Fig.7.3. Completed panel of Administrative support

Main	Level 1 - Business Analytics
Level 1 - Business Analytics	Lesson 1 - The essential software requirement/Основы разработки требований к ПО
Lesson 1 - The essential software r...	Определение требований к ПО
Lesson 2 - Requirements from the cu...	Особенности интерпретации требований
Lesson 3 - Good practices for requi...	Три уровня требований
Lesson 4 - The business analyst / ...	Документирование
Lesson 5 - Establishing the busines...	Управление требованиями
Extra lesson - Process video and do...	Когда плохие требования появляются у хороших людей
Book - Record Management Systems	Assignment 1
Level 2 - Practice in eBA System	Lesson 2 - Requirements from the customer perspective/Требование с точки зрения клиента
Lesson 1 - Work with form. Their in...	Кто же клиент?
Lesson 2 - Work with flow. Their in...	Билль о правах клиента ПО
Lesson 3 - Codes and Errors	Выгоды от высококачественного процесса разработки требований
Extra lesson - Middle process video...	Assignment 2
Level 3 - Business Analyst in eBA S	Lesson 3 - Good practices for requirements engineering/Рекомендуемые приемы формы требований
Lesson 1 - Type of clients. Main 7...	Каркас процесса создания требований
Lesson 2 - Processes in automation	Управление проектом
Lesson 3 - Testing finished process...	Спецификация
Extra lesson - Hard process video a...	Lesson 4 - The business analyst / Бизнес-аналитик

\* Fig.7.4. Knowledge base content in web page

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