1.- Implementation of a streaming system for live conferences

Objective of change: The goal of implementing a live streaming system for WebCongress conferences is to expand the event's reach, improve accessibility, and offer an interactive experience for attendees, enabling real-time participation without the need to be physically present at the conference.

State 1: Design Phase

If the implementation of the streaming system for live conferences is requested during the software design phase, the impact will be significant, but will be manageable.

System Component Impact

| System Component | Impact |
|----------------------------|---|
| Backend Architecture | Streaming servers, video compression, and |
| | transmission protocols must be included |
| Database | Conference recordings and streaming |
| | event metadata must be managed |
| Frontend (User Interface): | Video players, live chat, and user controls |
| | must be added. |
| Administration Module: | Organizers must be able to manage live |
| | streaming and configure streaming events. |

Impact on Cost: Total cost increase an increase of \$2,500 to \$3,500 USD is estimated due to the need for streaming servers and infrastructure adjustments.

Impact over Time: Estimated additional time: +1.5 to 2 months due to integration of new technologies and transmission testing.

Acceptance of change: Depending on the available budget and strategic priority, it can be accepted if the Decision Council approves the increase in costs and time.

State 2: Streaming System Implementation in the Mid-Development Phase (50% Completed)

If the change is requested when the software is already 50% developed, the impact will be significantly greater than if it had been considered in the design phase. The main reason is that architectures, databases, and workflows have already been defined, which can mean that streaming integration requires complex structural modifications.

System Component Impact

| System Component | Impact |
|-----------------------|---|
| Backend Architecture: | Reconfiguration is required to support live |
| | streaming, which may affect already |
| | implemented modules. |
| Database: | Must be adjusted to store conference |
| | recordings, which may affect the current |
| | data structure |
| Frontend: | Pre-developed screens must be modified |
| | to include live video players, chat, and user |
| | controls. |
| Administration Module | Modification is required to allow |
| | administrators to manage streaming |
| | events. |

Impact on Cost: Total cost increase an increase of \$3,500 to \$5,000 USD is estimated, as the change involves reconfiguring and rewriting parts of the system already implemented.

Impact over Time: Estimated additional time: +2 to 2.5 months due to code restructuring and compatibility testing.

Acceptance of change: NOT ACCEPTED, unless additional financing is obtained to absorb the additional cost.

State 3: Streaming System Implementation in the Final Phase (90% of Development Completed)

If the change is requested when the software is 90% developed, the impact will be critical because the architecture, databases and functionalities have already been implemented and tested.

System Component Impact

| System Component | Impact |
|-----------------------|--|
| Backend Architecture: | Already tested code must be restructured, |
| | increasing the risk of failures in other parts |
| | of the system. |
| Database: | It must be modified to store recordings |
| | and handle real-time streaming, affecting |
| | the integrity of existing data. |
| Frontend: | Completed screens must be modified to |
| | add streaming features and additional |
| | controls. |
| Administration Module | Modifications to the administration panels |
| | are required, which could affect the |
| | stability of the platform in production. |

Impact on Cost: Total cost increase: \$5,000 - \$7,000 USD due to the need to rework already developed and tested modules.

Impact over Time: Estimated additional time: +4 to 5 months, as completed modules must be modified and the entire system retested.

Acceptance of change: NOT ACCEPTED, It could only be considered for a future version of the system, since the impact on time, costs and structure is too high at this stage of the project.

STRENGHTS WEAKNESSES

- We have staff with the necessary experience and knowledge.
- Increased demand for testing and optimization
- Requires a robust server infrastructure.

OPPORTUNITIES

• Possibility of integrating better tools

THREATS

Limited budget

2.- Integration of more payment platforms

The goal of integrating more payment platforms into WebCongress is to expand the payment options available to users, improve financial accessibility, and increase sales by allowing more attendees to easily register and pay for their passes.

State 1: Integration of Payment Platforms in the Software Design Phase

If the integration of more payment platforms is requested during the software design phase, the impact will be low, since the payment system has not yet been implemented and adjustments can be made.

System Component Impact

| System Component | Impact |
|-----------------------|---|
| Backend Architecture: | APIs should be designed to support |
| | multiple payment gateways. |
| Database: | More information about transactions, |
| | payment statuses, and methods used |
| | needs to be stored. |
| Frontend: | A responsive interface should be designed |
| | that allows users to choose between |
| | multiple payment options. |
| Administration Module | A section should be designed to monitor |
| | payments made through different |
| | providers. |

Impact on Cost: Total cost increase \$1,500 - \$2,000 USD due to the need to integrate multiple third-party APIs and security testing.

Impact over Time: +1 per month as each payment gateway must be configured and extensive testing performed.

Acceptance of change: Change is accepted. In the design phase, it's easier to adjust the architecture to support multiple payment platforms without affecting work already done.

State 2: Integration of More Payment Platforms in the Mid-Stage of Development (50% Complete)

If the integration of more payment platforms is requested when the software is already 50% developed, the impact will be moderate to high.

System Component Impact

| System Component | Impact |
|-----------------------|---|
| Backend Architecture: | Existing payment logic and controllers |
| | must be modified to support multiple |
| | gateways. |
| Database: | Additional information must be added to |
| | handle different states and payment |
| | methods. |
| Frontend: | Payment screens should be redesigned to |
| | include multiple options. |
| Administration Module | Options to view payments from different |
| | platforms should be included. |

Impact on Cost: Total cost increase \$2,500 - \$4,000 USD, due to reconfiguration of already implemented modules and new compatibility testing.

Impact over Time: +2 months, as existing modules must be modified, tested, and compatibility with the current system must be ensured.

Acceptance of change: It is not accepted at this stage unless there is strategic justification and additional funding.

State 3: Integration of More Payment Platforms in the Final Phase (90% of Development Completed)

If the integration of more payment platforms is requested when the software is 90% developed, the impact will be critical.

System Component Impact

| System Component | Impact |
|-----------------------|--|
| Backend Architecture: | Already tested and optimized code must |
| | be modified, which can introduce errors. |
| Database: | New payment method records must be |
| | added, affecting already structured |
| | financial reports. |
| Frontend: | Forms and payment flows must be |
| | redesigned, which could disrupt the |
| | already validated user experience. |
| Administration Module | Transaction management should be |
| | updated to allow monitoring of payments |
| | from different platforms. |

Impact on Cost: Total cost increase \$4,000 - \$6,000 USD, as it requires reworking already tested and certified modules, in addition to performing additional testing.

Impact over Time: +3 to 4 months, as the entire payment integration must be reconfigured and tested without compromising system stability.

Acceptance of change: NOT ACCEPTED, It could only be considered for a future system update, after launch.

STRENGHTS

• We have staff with the necessary experience and knowledge.

WEAKNESSES

- Additional costs for payment gateway commissions.
- Greater complexity in transaction management and financial reconciliation

OPPORTUNITIES

• Possibility of integrating better tools

THREATS

- Limited budget
- Requires agreements with banking institutions

3- Implementing a networking feature for attendees

The goal of implementing a networking feature in WebCongress is to improve interaction between attendees, allowing them to establish professional connections and expand their network of contacts within the event.

State 1: Implementing a Networking Function in the Software Design Phase

If the implementation of the networking function is requested during the software design phase, the impact will be low.

System Component Impact

| System Component | Impact |
|-----------------------|--|
| Backend Architecture: | A module must be designed to manage |
| | contacts, messaging and connection |
| | between users. |
| Database: | Storage of user profiles, connection |
| | requests and messages should be planned. |
| Frontend: | New sections should be designed for |
| | profiles, chat, networking |
| | recommendations, and attendee search. |
| Administration Module | Tools should be added to manage reports |
| | of misuse or moderate interactions. |

Impact on Cost: Total cost increase \$2,000 - \$3,500 USD, due to the need to design and implement new data structures and interactive functionality.

Impact over Time: +1.5 to 2 months, as new interfaces, databases, and user connection logic must be designed.

Acceptance of change: Change is accepted. In the design phase, requirements can be defined from the outset, avoiding future rework. It's a strategic change that improves the user experience and increases the value of the system.

State 2: Implementing a Networking Function in the Mid-Phase of Development (50% Complete)

If the networking function is requested when the software is already 50% developed, the impact will be significant, since several modules of the system have already been designed and programmed

System Component Impact

| System Component | Impact |
|-----------------------|---|
| Backend Architecture: | The system structure must be modified to allow |
| | connections between users and messaging. |
| Database: | New tables need to be added to handle |
| | contacts, connection requests, and messages. |
| Frontend: | New interfaces should be added to display |
| | profiles, contact lists, and chat options. |
| Administration Module | A tool is needed for administrators to moderate |
| | interactions and manage abuse reports. |

Impact on Cost: Total cost increase: \$3,500 - \$5,000 USD, due to the need to modify already developed code and test integration with other modules.

Impact over Time: +2 to 2.5 months, as existing modules need to be modified and compatibility testing performed.

Acceptance of change: It is not accepted at this stage unless there is strategic justification and additional funding.

State 3: Implementation of a Networking Function in the Final Phase (90% of Development Completed)

If the networking function is requested when the software is already 90% developed, the impact will be critical, since modules that have already been completed, tested and optimized will have to be modified.

System Component Impact

| System Component | Impact |
|-----------------------|---|
| Backend Architecture: | Already tested and optimized code must be |
| | modified to integrate networking logic. |
| Database: | New tables and relationships are required to |
| | store connections between users, messages, |
| | and networking preferences. |
| Frontend: | Completed interfaces must be modified and |
| | added to include profiles, contact lists, and |
| | chats. |
| Administration Module | A tool is needed to moderate interactions and |
| | manage abuse reports, which requires |
| | modifications to the admin panel. |

Impact on Cost: Total cost increase \$5,000–\$7,500 USD, as it requires reworking completed modules, performing new tests, and ensuring compatibility with the existing system.

Impact over Time: +3 to 4 months, due to modification of tested code, integration with existing modules and stability testing.

Acceptance of change: NOT ACCEPTED. We recommend postponing this feature for a future system update.

STRENGHTS

• We have staff with the necessary experience and knowledge.

WEAKNESSES

Additional storage may be required for user data

OPPORTUNITIES

Possibility of integrating better tools

THREATS

- Limited budget
- Add secure privacy and security methods