

## V. Strateško planiranje informatike

- Definicija: Strateško planiranje informatike je proces definiranja nabora aplikacij, ki so organizaciji v pomoč pri uresničevanju poslovnih planov ter s tem njenih poslovnih ciljev
- Definicije strateškega planiranja izražajo skupno idejo o tem, da mora strateški plan informatike:
  - izhajati iz poslovnega strateškega plana,
  - organizaciji omogočati uresničitev njenih strateških ciljev ter
  - ji s tem posredno zagotoviti trajno konkurenčno prednost.

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## Strateški plan informatike ali Strateški plan digitalizacije?

- Strateški plan informatike praviloma obsega naslednje ključne elemente:
  - Analiza obstoječega stanja informatike in informacijskega sistema (AS-IS)
  - Opredelite potrebnih novosti, sprememb in dopolnitev
  - Opredelitev zelenega ciljnega stanja (TO-BE)
  - Opredelitev portfelja projektov, ki omogoča doseči zeleno ciljno stanje
- Kaj so tehnologije (nove) digitalizacije?
  - Senzorji
  - Avtonomne naprave/sistemi
  - Digitalni dvojčki
- Moje mnenje: *Strateški plan digitalizacije* je zgolj „bolj moderen“ naziv za *Strateški plan informatike*

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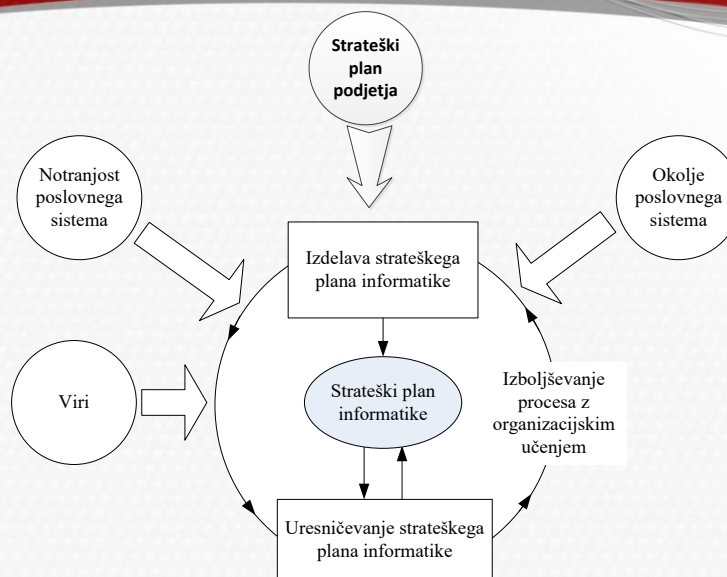
## V.1 SPI je kontinuiran proces

- Strateško planiranje informatike je **kontinuiran učeči proces**, sestavljen iz **procesov izdelave in uresničevanja (izvajanja)**, v katerem **vodstveni delavci, (notranji in zunanji) strokovnjaki s področja informatike in uporabniki s partnerstvom** tako pri **izdelavi, uresničevanju kot vrednotenju rezultatov** strateškega plana zagotavljajo maksimalno izrabo informacijskih tehnologij za doseganje dolgoročne uspešnosti poslovnega sistema

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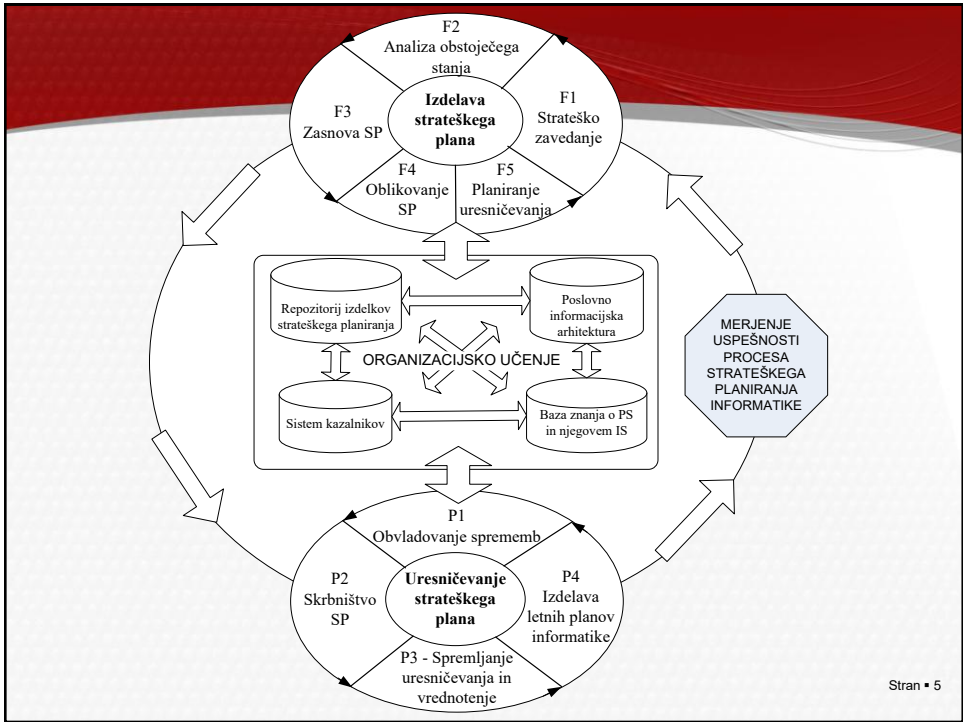
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## V.2 Izdelava strateškega plana in njegovo uresničevanje/izvajanje



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## V.3 Poslovno informacijska arhitektura - PIA

- Poslovno-informacijska arhitektura (ang. *Enterprise Architecture*, v nadaljevanju PIA) je sistematični pristop k zajemu in upravljanju:
  - **poslovnih modelov**: modelov poslovnih procesov, organizacijske strukture, modeli funkcionalnih področij in funkcionalne dekompozicije, ...,
  - **modelov njihove informacijske podpore**: aplikacije, integracije med aplikacijami v okviru informacijskega sistema, aplikativne podpore poslovnih procesov, ... ter
  - **modelov tehnološke infrastrukture**

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### ▪ Obvladovati PIA pomeni:

- Poznavanje delovanja poslovnih in odločitvenih procesov ter njihovih informacijskih potreb
- Nadzorovano uvajanje aplikacij:
  - v smeri učinkovite podpore poslovnih in odločitvenih procesov ob zagotavljanju, da le-ta ni parcialna (oz. je čim manj parcialna), temveč čim bolj celovita
  - skrbeti tudi za nadzor nad standardizacijo tehnologij, tudi tehnologij za integracije v smeri zagotavljanja ustreznosti aplikativne arhitekture
- Nadzorovano uvajanje konceptov, elementov in tehnologij tehnološke infrastrukture in sistemske programske opreme

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## PIA je primerna kot/za:

- **Osnova za predstavitve in komunikacijo:** Poslovno-informacijska arhitektura daje celovit pogled na delovanje poslovnega sistema in njegovo sodelovanje navzven. Različni modeli, ki izhajajo iz PIA, posameznim deležnikom predstavijo točno tisti del PIA, ki je zanje relevanten, in na način, ki ga umešča v celosten pogled na poslovni sistem. S tem so tudi osnova za komunikacijo med različnimi deležniki.
- **Osnova za načrtovanje:** Poslovno-informacijska arhitektura lahko zajema opis obstoječega stanja ali ciljnega (želenega) stanja. Pri tem lahko analiziramo različice želenega stanja in razhajanja med njimi – kaj je potrebno spremeniti, dodati, prilagoditi, da dosežemo želeno stanje. Pri tem igrajo pomembno vlogo tehnike arhitekturne analize, na primer analiza vpliva sprememb.
- **Zagotavljanje skladnosti in povezanosti vseh delov poslovnega sistema:** Poslovno-informacijska arhitektura omogoča zagotavljanje povezanosti poslanstva, vizije, poslovnih ciljev, poslovne strategije itd. s poslovnimi procesi in organizacijo.

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## V.4 Metodologija strateškega planiranja informatike

- Načini prikaza in opredeljevanja metodologij
- Koncepti:
  - Vloge
  - Postopki
  - Aktivnosti
  - Izdelki
- Teoretične osnove:
  - Tehnike
  - Pristopi

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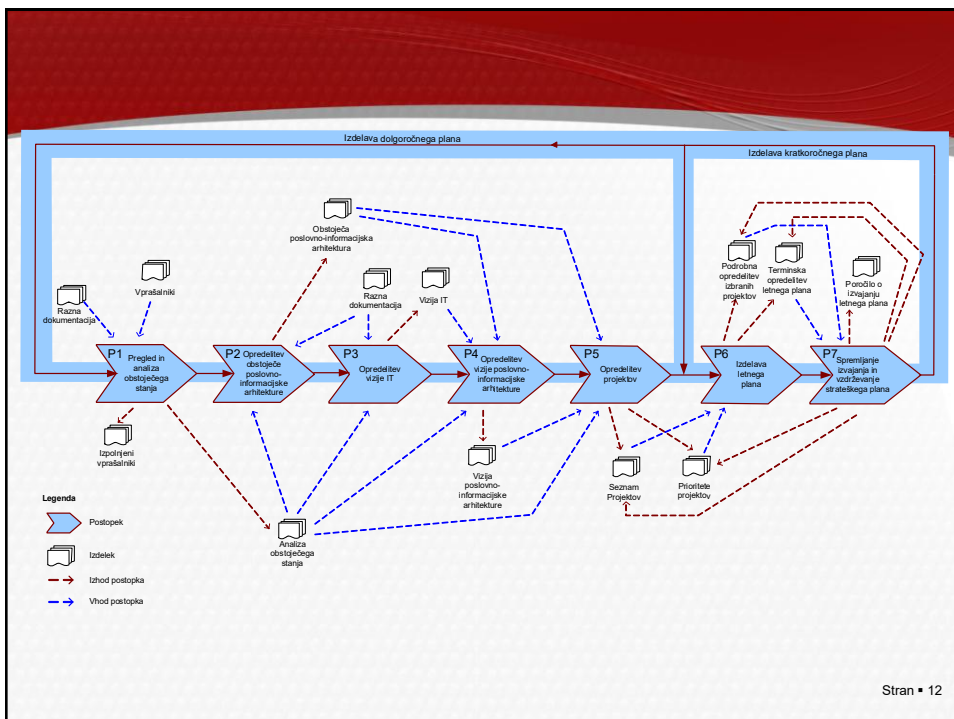
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## V.4.1 Postopki

- Pregled in analiza obstoječega stanja
- Opredelitev obstoječe poslovno-informacijske arhitekture
- Opredelitev vizije informacijske tehnologije
- Opredelitev vizije poslovno-informacijske arhitekture
- Opredelitev projektov
- Spremljanje izvajanja in vzdrževanja strateškega plana

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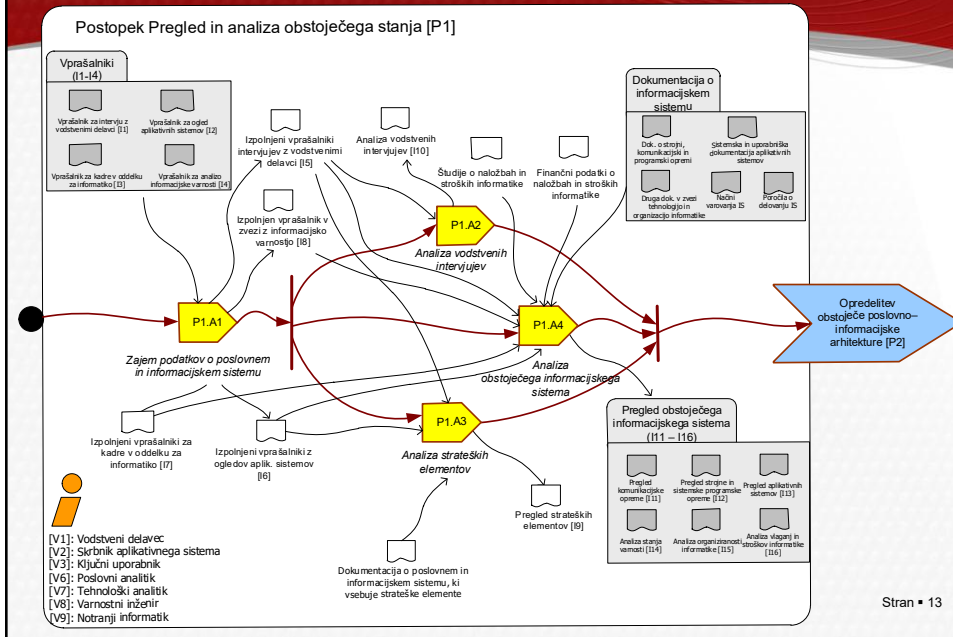
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## V.4.1.1 Pregled in analiza obstoječega stanja



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## Področja obravnave

- Informacijska podpora poslovnih procesov in problemi informacijske podpore
- Informacijska podpora odločanju in problemi informacijske podpore
- Informacijska podpora vodenju in izvajanju projektov
- Dokumentni sistem
- Elektronsko in mobilno poslovanje – Raven digitalizacije
- Skupna IT infrastruktura in uporaba IT infrastrukture kot storitve v oblaku
- Obvladovanje informatike
- Upravljanje s sredstvi (Asset management)
- Uporaba tehnologij digitalizacije

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## Strateški elementi

- Vizija in poslanstvo
- Poslovna strategija:
  - Usmeritve in cilji
  - Problemi
- Informacijski sistem:
  - Usmeritve in cilji
  - Problemi
- Matrike:
  - Cilji IS – Cilji PS
  - Cilji IS – Problemi PS

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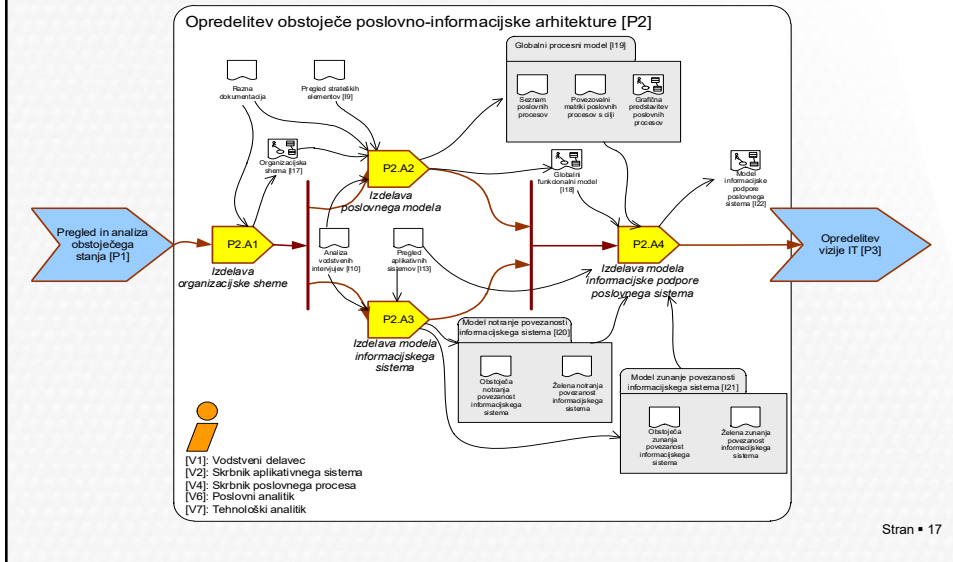
## Analiza vlaganj v informatiko in stroškov informatike

- Vlaganja v informatiko
- Obratovalni stroški informatike

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## V.4.1.2 Opredelitev obstoječe poslovno-informacijske arhitekture (Stanje AS-IS)



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## Organizacijska shema

- Umestitev informatike v organizacijsko shemo
- Različni modeli umestitve

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## Model informacijskega sistema

- Prikazuje „interne“ aplikacije in povezave med njimi – model notranje povezanosti
- Prikazuje aplikacije in njihovo povezanost z zunanjimi sistemi – model zunanje povezanosti

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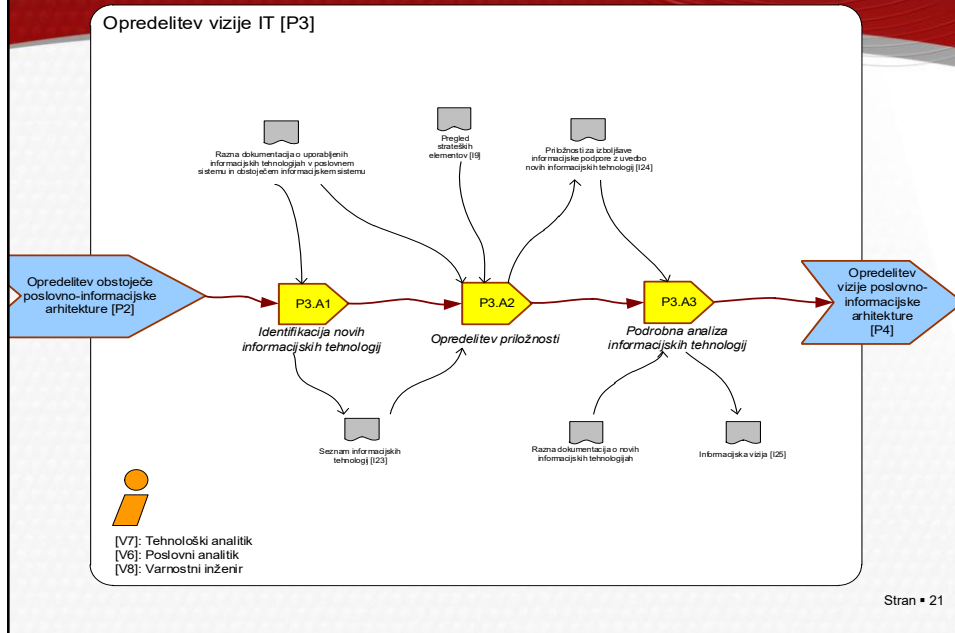
## Model informacijske podpore poslovnega sistema

- Prikazuje poslovne procese in aplikacije, ki jih informacijsko podpirajo

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### V.4.1.3 Opredelitev vizije informacijske tehnologije



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### Nove informacijske tehnologije – Nove tehnologije digitalizacije

- Nove IT: tiste, se v informacijskem sistemu (še) ne uporabljajo
- Ne gre za tehnologije v ožjem pomenu besede, gre tudi za področja. Primeri:
  - BI
  - CRM
  - ASM, EAM
  - Digitalni podpis
  - Dokumentni sistem
  - .....

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## Organizacijska shema - vizija

- Gre za podajanje predlogov na kočljivem področju

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## Model informacijskega sistema - vizija

- Vizija modela notranje povezanosti
- Vizija modela zunanje povezanosti
- Opredelitev potrebnih sprememb za vsa področja obravnave (kot so bila pri *Pregledu obstoječega stanja*)
- Opredelitev zelenega ciljnega stanja

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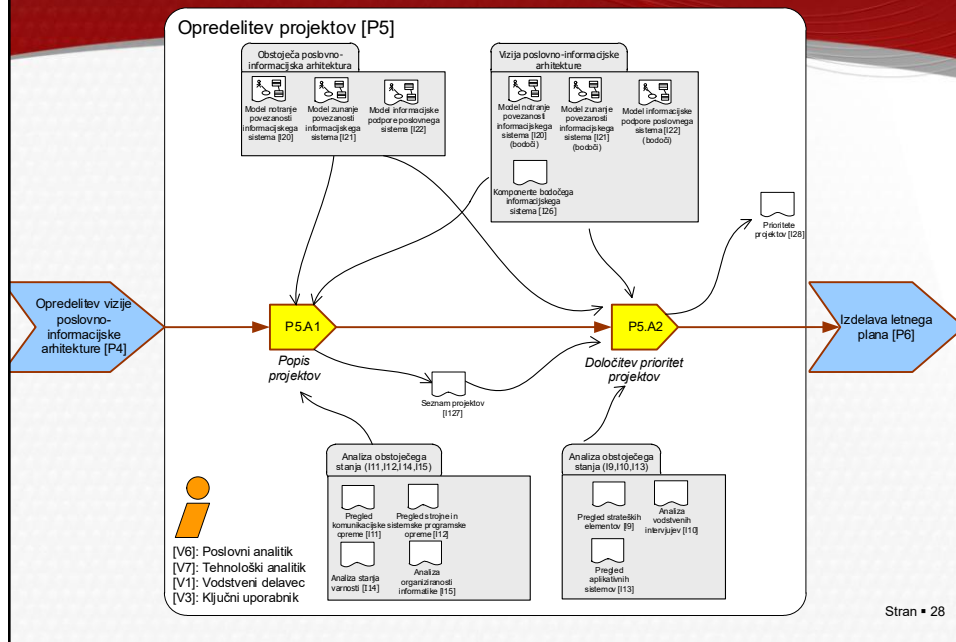
## Model informacijske podpore poslovnega sistema - vizija

- Problem prenove poslovnih procesov
- Prenove poslovnih procesov in prilagajanje informacijske podpore

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## V.4.1.5 Opredelitev projektov



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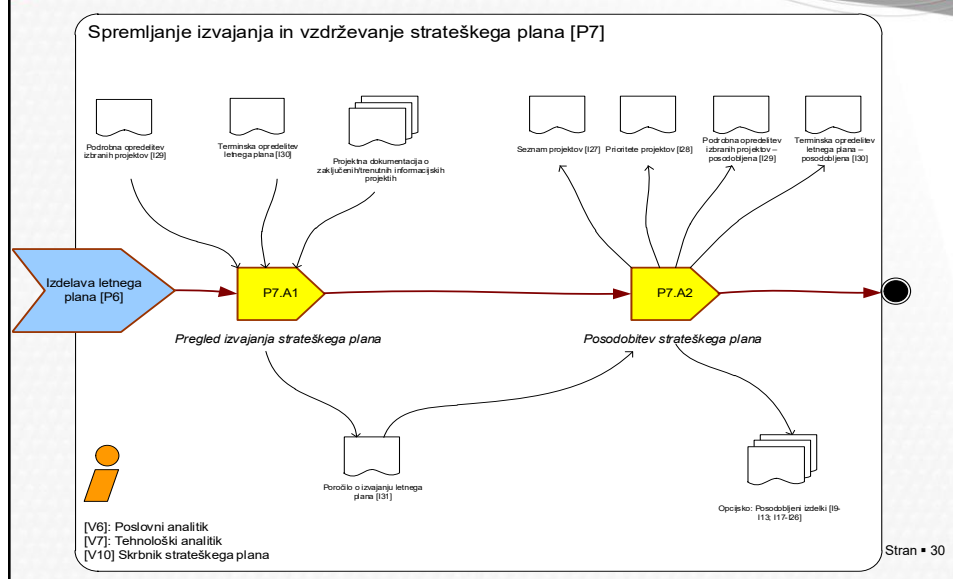
## Opisi projektov v portfelju projektov

- Način in nivo podrobnosti opisa projektov lahko variira
- Gre v bistvu za izdelavo akcijskega načrta
- Tipi projektov:
  - Organizacijski
  - Pripravljalni
  - Implementacijski
- Področja projektov:
  - Podpora odločanju
  - Poslovni informacijski sistem
  - *Podjetju specifična področja*

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## V.4.1.7 Spremljanje izvajanja in vzdrževanja strateškega plana



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## 5. Za sprostitev

- Make sure a strategy is meaningful to its main stakeholders.
- Distinguish between operational and strategic thinking.
- Be careful not to interpret disinterest as trust.
- Don't ever underestimate the pace of corporate strategy.
- Make sure your strategy can handle people changing their minds as well as their tactics.
- Build your strategy on a promise, not an aim.
- If your strategy is founded on solving a problem, make sure that it can feasibly do so.
- A strategy document is not the strategy.
- The language you use is taken as evidence of your mindset.
- If your company has a strategy for IT, make sure its scope covers all of the IT the company uses.
- You should be able to summarize your strategy in one meaningful sentence.
- If you have an IT roadmap, make sure it's demonstrably driven by your company's strategies and tactics – not those of your IT suppliers.
- If you run IT like a separate business, expect to be treated like one.

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- Being perceived as a supplier disqualifies you from making a full contribution to corporate strategy.
- If you follow Graham's Pyramid, there are 12 major types of strategist, (4 primary areas of focus x 3 secondary areas of focus).
- Different kinds of strategy need different types of strategist.
- Start shaping the strategy by exploring why the company is not already achieving its Promise.
- A corporate strategy for exploiting IT is focused on value, money and people. IT gives it a scope but it is not about technology.
- The directors of a company are an interdependent community of value creators.
- Value is a portfolio of types and measures.
- Many perceptions and relationships are based on a few high-profile characteristics.
- Customers of IT expect service; service level agreements with IT suppliers are necessarily about services. Using the coffee shop analogy, where's the service element of IT?
- Corporate and business strategies are ultimately about numbers. Make the strategy for IT the same.

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- Strategy is not everyone's idea of fun.
- Formulate the strategy through re-iteration and evolution.
- Look for the numbers to speak for themselves.
- Explore how your company budgets for, manages and measures business change projects involving IT.
- In the initial formulation of a strategy, engage each key stakeholder individually before then engaging them as a group.
- Lead the execution of a strategy, don't manage it.
- Make the strategy personal to each individual who can influence its execution. A document is unlikely to do this.
- Using innovative ways of presenting numbers can expose previously hidden knowledge.
- Establish the primary value contribution of each project and any secondary contributions.
- Build a bottom up value portfolio.
- Expose the 'de facto' investment strategy to drive discussion of strategic priorities for exploiting investments.
- Prepare ahead for the consequences if the 'de facto' investment strategy looks wrong to its stakeholders.

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- Each stakeholder in a strategy has something distinctive to offer.
- Language and communications are critical to a strategy's success.
- What's practical, theoretical or abstract depends on the audience. Adjust the way you articulate the strategy according to who's listening.
- People in companies are often doing good projects but are not making the most of what those projects deliver. It may be counter-cultural to do so.
- Strategy is about options and opportunities. It's not usually about being 'right'.
- Take the lessons from what didn't work as expected.
- Expect a corporate strategy to be, in part, about culture change.
- As you formulate a strategy, you're already executing it.
- Explore potentially different reasons for people's responses.
- Always have plans B and C for keeping your strategic Promise.
- The CIO role has a unique perspective on business changes around the company.
- Who's accountable for the energy behind a strategy?
- Qui pro quo: be prepared to give up something to get something else.

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- Show why the IT investment total is the wrong number to use for prioritization decisions.
- Highlight that strategically important projects may have low or negative financial returns on investment.
- Proactively manage the overall impact of the portfolio on future costs to P&L.
- Expose why managing the costs of IT in isolation is a flawed process.
- Show that the costs of IT to P&L are a longer-term consequence of business decisions, and need proactive forward management.
- Explore the causes-and-effects linking IT numbers with overall business investments and the creation of value.

- The strategist has to cause other people to change.
- Know what you would 'die in the ditch' over.
- The corporate strategists' perspectives of IT: not keeping promises and not caring enough about strategy?
- The strategic energy is in the conflicts. 100% alignment between strategies is unlikely and potentially disastrous.
- The future value of the CIO role is not assured.
- There are competencies in IT departments that also exist elsewhere in a company.
- A new generation of strategy for IT requires a different operating model.

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- Leading strategy can be a lonely job.
- Strategies are about winning: a strategy that you're not fully committed to achieving is not really a strategy.
- A strategy may look like the obvious until people see - for example from the numbers - that they are not currently applying it in practice.
- Use your strategy to test the relevance of industry 'best practices'.
- Strategy is what you do and who you are: your 'de facto' strategy is your strategy.

- If the company manages its investments well, the most appropriate technology decisions will follow.
- At an early stage, facilitate an agreement among the executives - using a value portfolio - on the strategic priorities for investments in change while also considering the consequences for the current investment plans.
- Assign executive accountability for maximizing the total value the company creates from internal investments in change.

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## 5. Povezava med poslovnimi cilji in IT cilji

Figure 1—Validated Lists of Business and IT Goals

Business Goals	IT Goals
<p><b>Financial (Corporate) Perspective</b></p> <ul style="list-style-type: none"> <li>– Manage (IT-related) business risks.</li> <li>– Provide a good return on (IT-enabled) business investments.</li> <li>– Improve financial transparency.</li> <li>– Ensure compliance with external laws and regulations.</li> </ul>	<p><b>Corporate Contribution</b></p> <ul style="list-style-type: none"> <li>– Offer transparency and understanding of IT costs, benefits and risks.</li> <li>– Ensure IT compliance with laws and regulations.</li> <li>– Account for and protect all IT assets.</li> <li>– Drive commitment and support of executive management.</li> <li>– Improve IT's cost-efficiency.</li> <li>– Align the IT strategy to the business strategy.</li> </ul>
<p><b>Customer Perspective</b></p> <ul style="list-style-type: none"> <li>– Improve customer orientation and service.</li> <li>– Establish service continuity and availability.</li> <li>– Offer competitive products and services.</li> <li>– Achieve cost optimisation of service delivery.</li> <li>– Create agility in responding to changing business requirements.</li> <li>– Obtain reliable and useful information for strategic decision making.</li> </ul>	<p><b>User Orientation</b></p> <ul style="list-style-type: none"> <li>– Make sure that IT services are reliable and secure.</li> <li>– Provide service offerings and service levels in line with business requirements.</li> <li>– Translate business functional and control requirements into effective and efficient automated solutions.</li> <li>– Accomplish proper use of applications, information and technology solutions.</li> </ul>
<p><b>Internal Perspective</b></p> <ul style="list-style-type: none"> <li>– Improve and maintain business process functionality.</li> <li>– Improve and maintain operational and staff productivity.</li> <li>– Enable and manage business change.</li> <li>– Ensure compliance with internal policies.</li> <li>– Optimise business process costs.</li> </ul>	<p><b>Operational Excellence</b></p> <ul style="list-style-type: none"> <li>– Maintain the security (confidentiality, integrity and availability) of information and processing infrastructure.</li> <li>– Deliver projects on time and on budget, meeting quality standards.</li> <li>– Optimise the IT infrastructure, resources and capabilities.</li> <li>– Provide IT agility (in responding to changing business needs).</li> <li>– Seamlessly integrate applications and technology solutions into business processes.</li> </ul>
<p><b>Learning and Growth Perspective</b></p> <ul style="list-style-type: none"> <li>– Acquire, develop and maintain skilled and motivated people.</li> <li>– Identify, enable and manage product and business innovation.</li> </ul>	<p><b>Future Orientation</b></p> <ul style="list-style-type: none"> <li>– Acquire, develop and maintain IT skills that respond to the IT strategy.</li> <li>– Acquire knowledge and expertise in emerging technologies for business innovation and optimisation.</li> <li>– Ensure that IT demonstrates continuous improvement and readiness for future change.</li> </ul>

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Figure 2—Prioritised Lists of Top 10 Business and IT Goals

Top 10 Business Goals	Top 10 IT Goals
<ol style="list-style-type: none"> <li>1. Improve customer orientation and service.</li> <li>2. Ensure compliance with external laws and regulations.</li> <li>3. Establish service continuity and availability.</li> <li>4. Manage (IT-related) business risks.</li> <li>5. Offer competitive products and services.</li> <li>6. Improve and maintain business process functionality.</li> <li>7. Provide a good return on (IT-enabled) business investments.</li> <li>8. Acquire, develop and maintain skilled and motivated people.</li> <li>9. Create agility in responding to changing business requirements.</li> <li>10. Obtain reliable and useful information for strategic decision making.</li> </ol>	<ol style="list-style-type: none"> <li>1. Align the IT strategy to the business strategy.</li> <li>2. Maintain the security (confidentiality, integrity and availability) of information and processing infrastructure.</li> <li>3. Make sure that IT services are reliable and secure.</li> <li>4. Provide service offerings and service levels in line with business requirements.</li> <li>5. Ensure IT compliance with laws and regulations.</li> <li>6. Translate business functional and control requirements into effective and efficient automated solutions.</li> <li>7. Deliver projects on time and on budget, meeting quality standards.</li> <li>8. Drive commitment and support of executive management.</li> <li>9. Improve IT's cost-efficiency.</li> <li>10. Account for and protect all IT assets.</li> </ol>

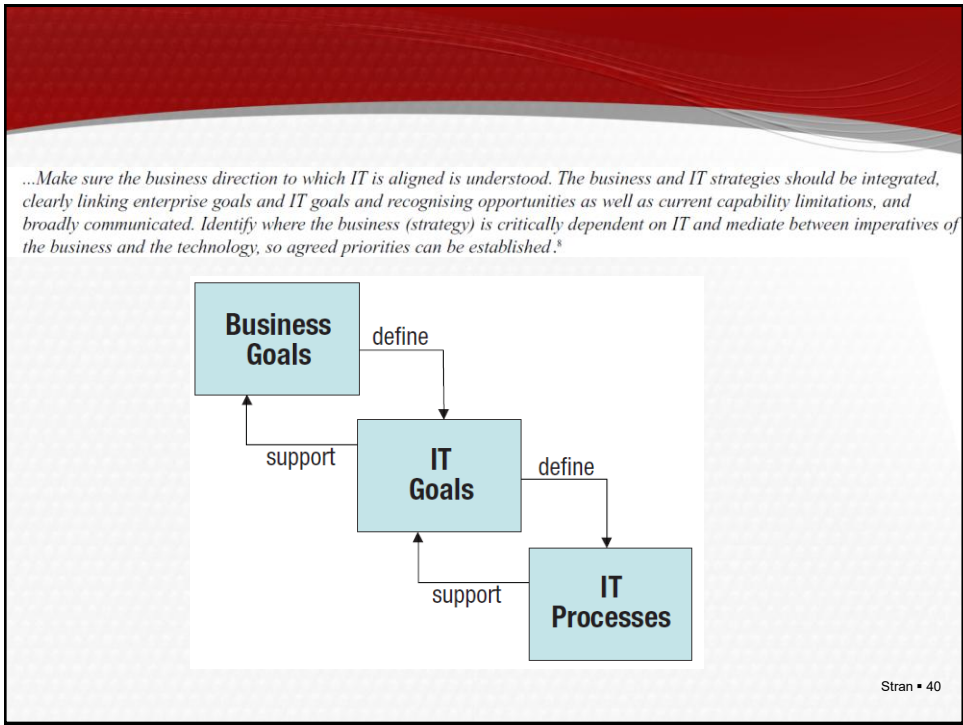
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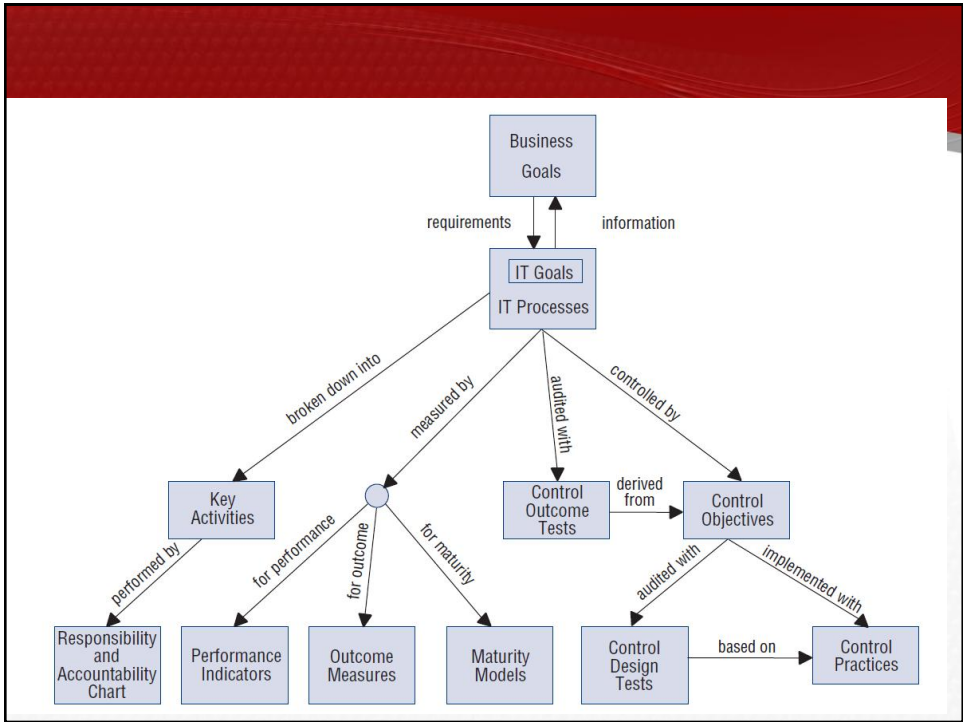
IT Goals	Business Goals															
	Improve customer retention and service, ensure compliance with external laws and regulations, Establish service continuity and availability	Manage IT-related business risks, Improve and maintain business processes	Provide a good framework on IT-related business requirements	Obtain reliable and useful information for delivery and optimisation of service	Enable and manage business costs	Improve and maintain business change and productivity	Improve financial transparency	Ensure compliance with internal policies and business innovation	Improve and maintain business processes	Improve and maintain business change and productivity	Improve financial transparency	Ensure compliance with internal policies and business innovation	Improve and maintain business processes	Improve and maintain business change and productivity	Improve financial transparency	Ensure compliance with internal policies and business innovation
Align the IT strategy to the business strategy.	P	S	S	P	P	P	S	S	S	P	P	S	S	S	S	P
Maintain the security (confidentiality, integrity and availability) of information and processing infrastructure.	P	P	P	P												P
Make sure that IT services are reliable and secure.	P	P	P	P	S	S	S	S	S	S	S	S	S	S	S	S
Provide service offerings and service levels in line with business requirements.	P		P	S	P	P	S	S	S	S	S	S	S	S	S	S
Ensure IT compliance with laws and regulations.	S	P	P	S											S	P
Translate business functional and control requirements into effective and efficient automated solutions.	S		S	S	S	P	S	S	S	S	S	S	S	S	S	S
Deliver projects on time and on budget, meeting quality standards.	S			S	S	S	S	S	S	S	S	S	S	S	S	S
Drive commitment and support of executive management.	S			S	S	S	S	S	S	S	S	S	S	S	S	S
Improve IT's cost-efficiency.				S			P			P					S	
Account for and protect all IT assets.			S	S	S		S			S			S		S	
Acquire, develop and maintain IT skills that respond to the IT strategy.	S			S			P	S	S	S	S	S	S	S	S	S
Provide IT agility (in responding to changing business needs).	S			S	S	S		P				P				S
Offer transparency and understanding of IT costs, benefits and risks.				S							S	S			P	
Optimise the IT infrastructure, resources and capabilities.				S	S	P	S		P	S	S	S	S	S		
Accomplish proper use of applications, information and technology solutions.	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Seamlessly integrate applications and technology solutions into business processes.	S				S	P	S	S	S	S	S	S	S	S	S	S
Ensure that IT demonstrates continuous improvement and readiness for future change.					S	S	S	P				S				P
Acquire knowledge and expertise in emerging technologies for business innovation and optimisation.					S	S	P	S	S			S	S			P

P = primary, S = secondary

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## Kratice

Kratice	Pojem
IKT	
ITK	
CFO	
CSO..	
CIO	
CEO	

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